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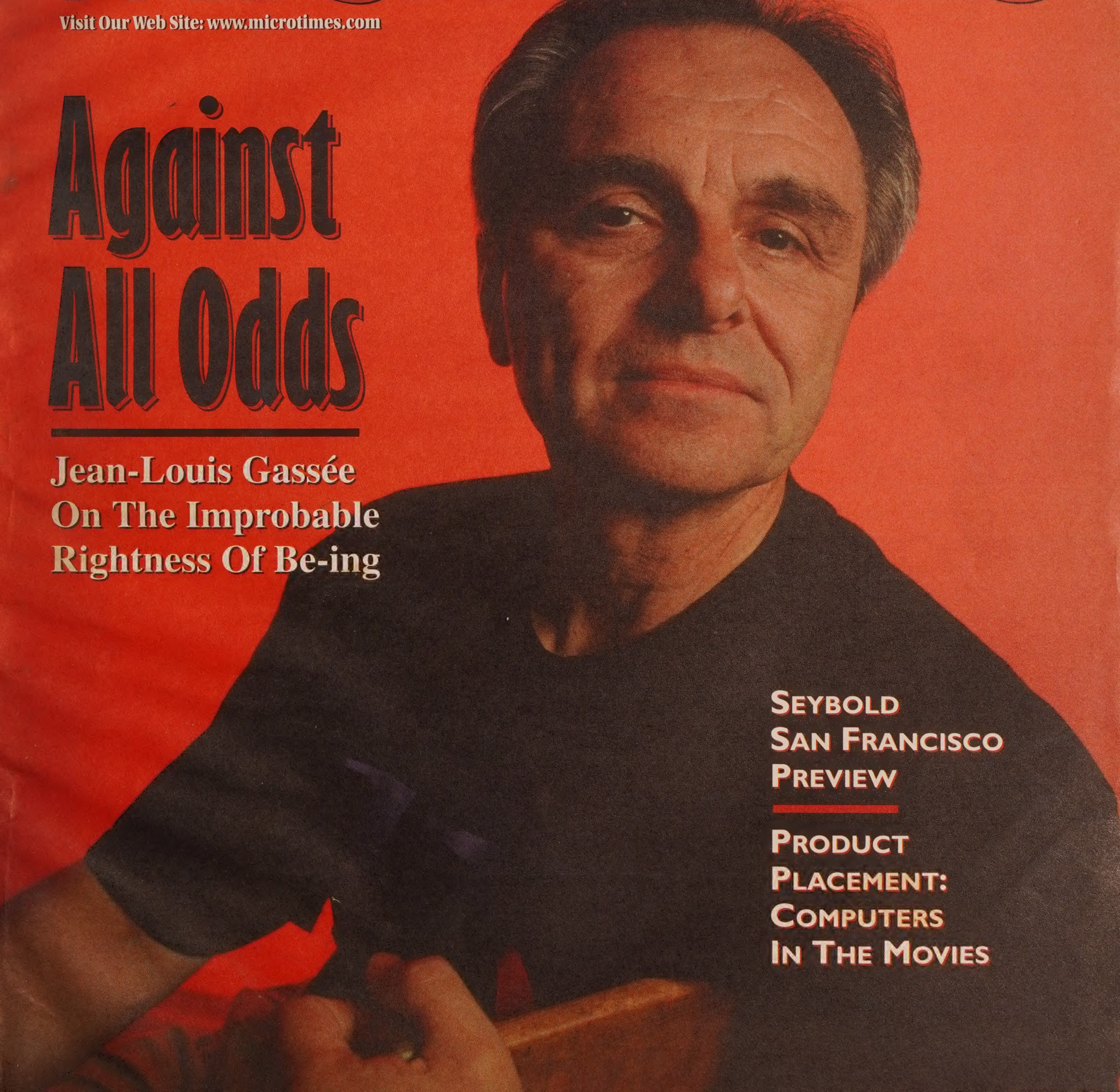

Against All Odds

Jean-Louis Gassée
On The Improbable
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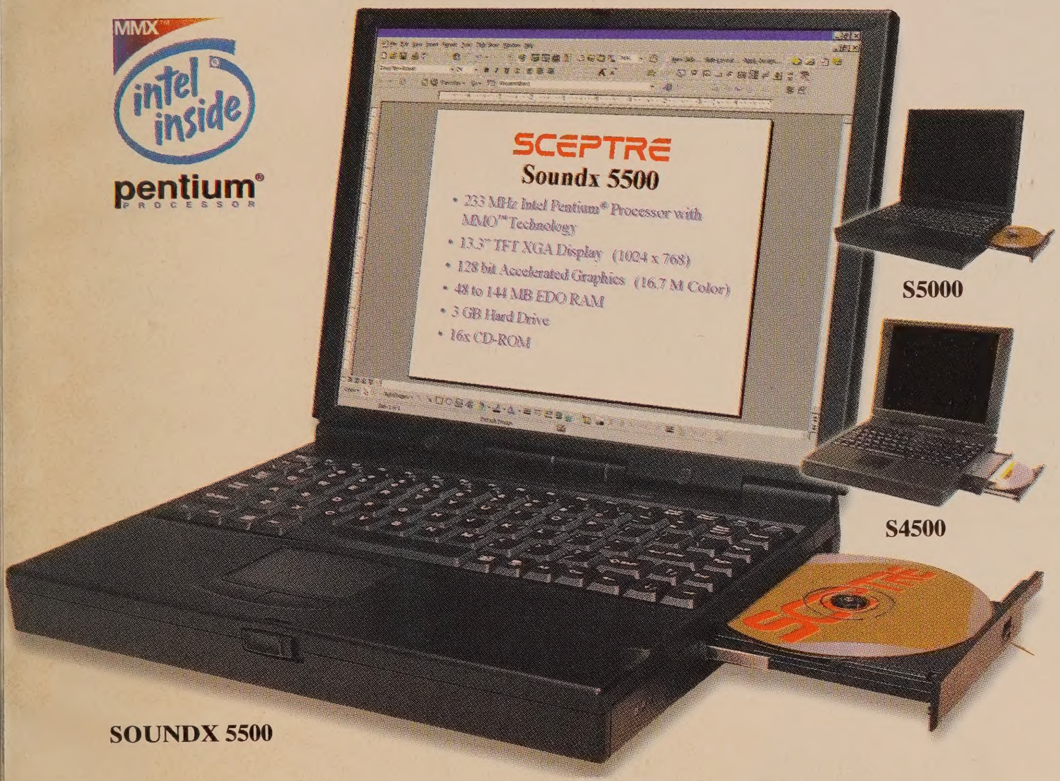
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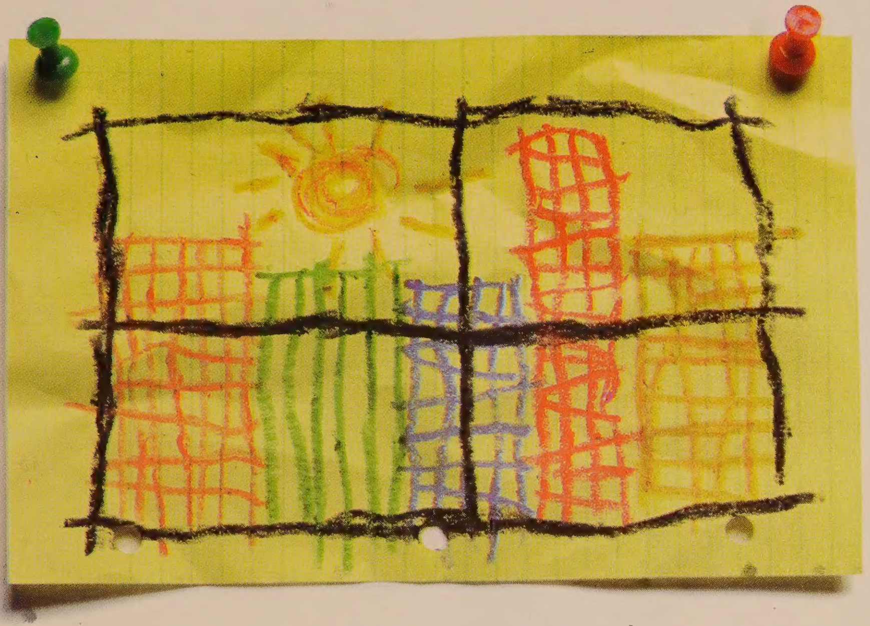

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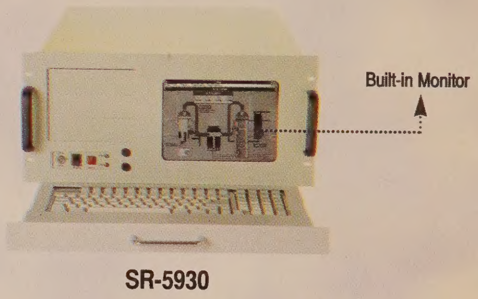

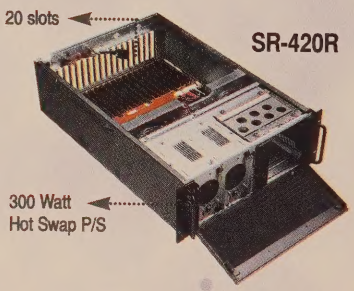

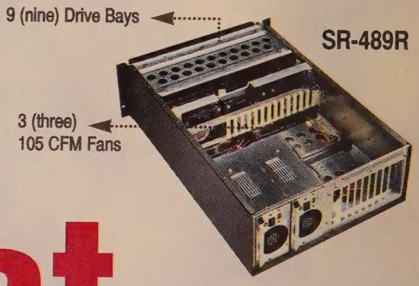

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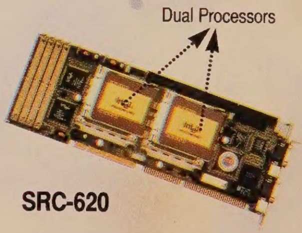

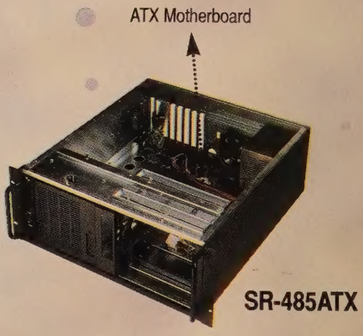

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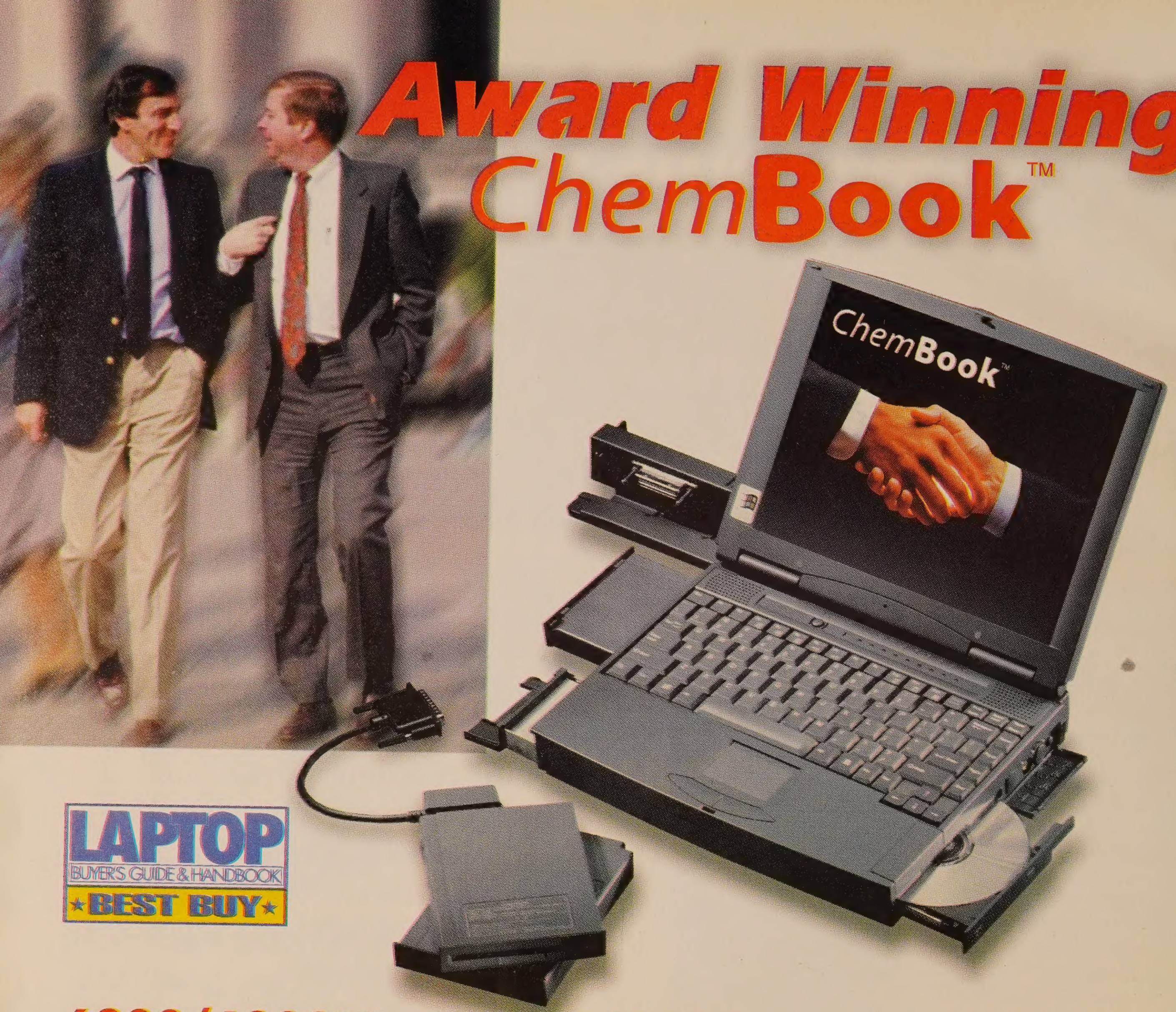

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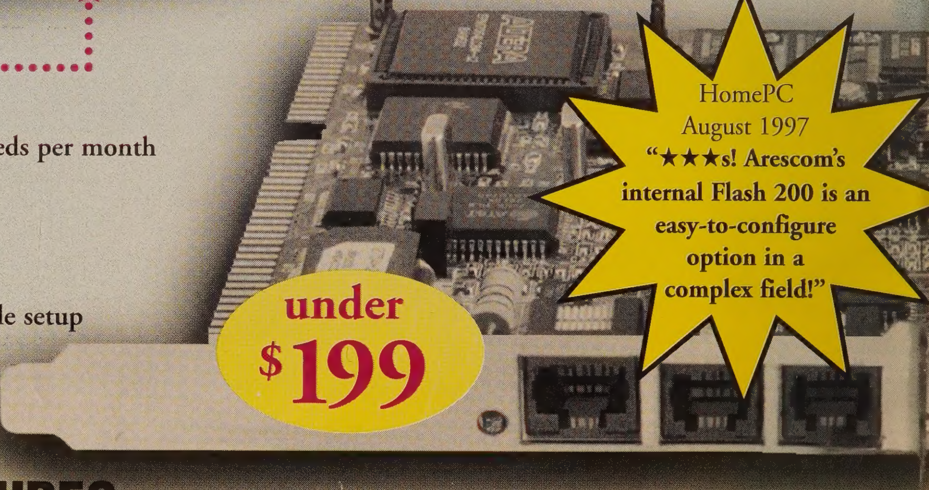

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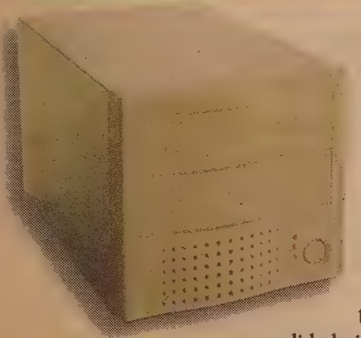

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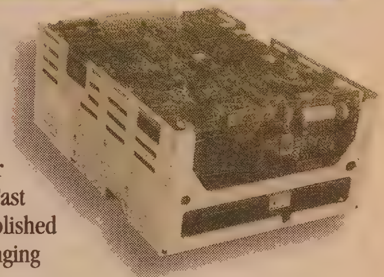

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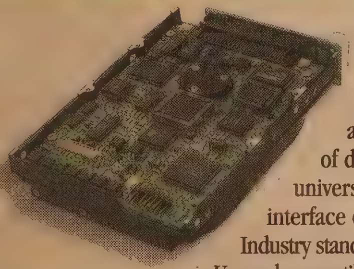

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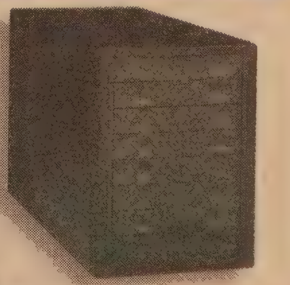

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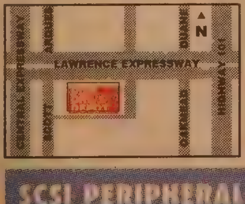

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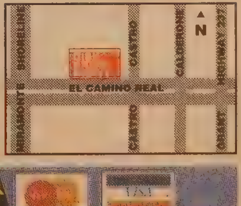

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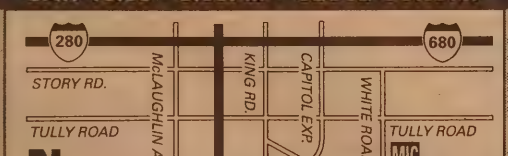

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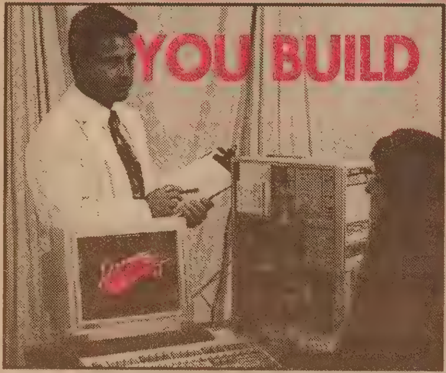

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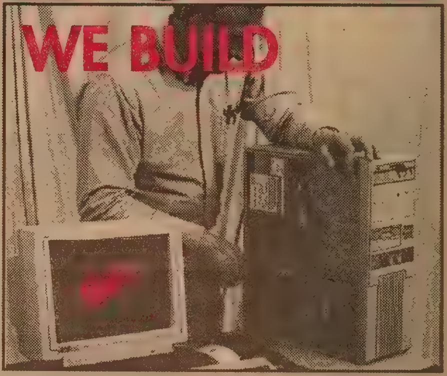

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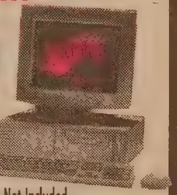

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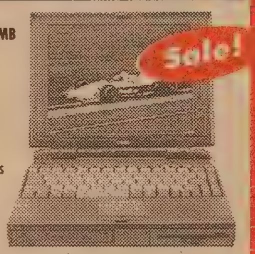

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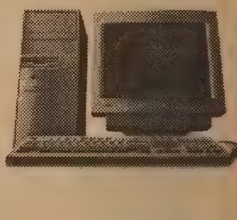

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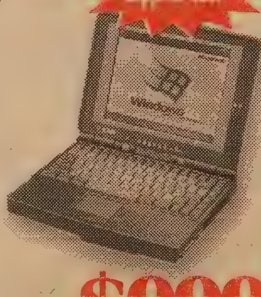

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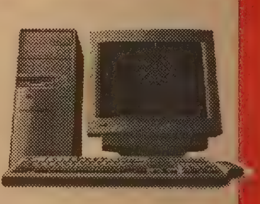

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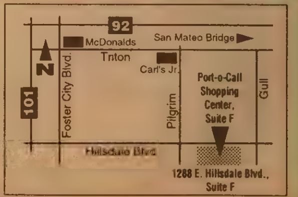

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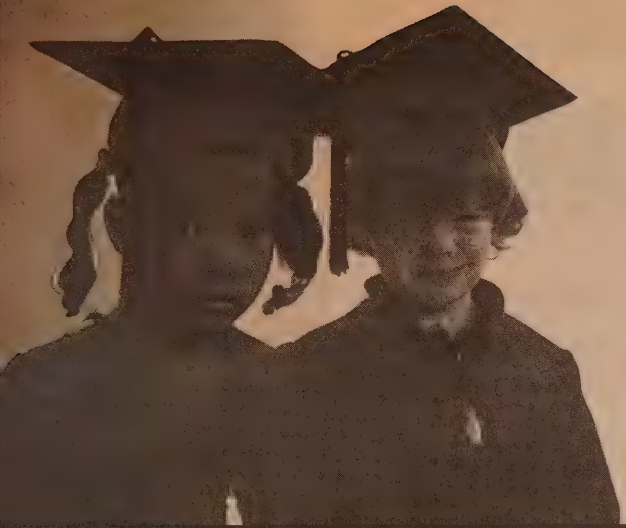


Student Scanner – $128!

Adding a scanner to your home PC is a great way to stimulate a student's creativity. Once they see how easy it is to scan color pictures, your kids will be adding graphics to every book report, research paper, or science project they're assigned.

This month, Envisions is making it easy to get started scanning with a special sale on the Umax Astra 300P, a compact (16" x 12" x 3") flatbed scanner that features 24-bit color and scans in a single pass. Because the Astra 300P connects directly to the parallel port of your PC, setup is quick and easy.

Thanks to a rebate from the manufacturer, this scanner has never been more affordable. Why not pick one up for the student in your life?

Umax Astra 300P – $128! ➔

Price after $30 manufacturer's rebate. Exp. 9/30/97

BACK-TO-SCHOOL SALE!

Already graduated? Check out the other great scanning specials available at the Envisions Scanner Outlet…

Umax Astra 600S

Now Just $198!

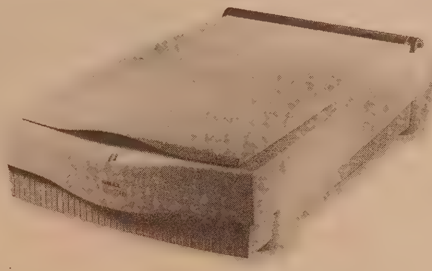
Fast SCSI scanning & legal-size bed

The Umax Astra 600S is the only scanner in its price range with 30-bit color and a full legal-sized scanning bed. The Astra 600S uses the same high-quality optics that have made Umax the 1997 Editors' Choice at both *PC Magazine* and *Macworld*.

With the 600S, you'll be able to add graphics to everything you produce on your PC. You can scan color photographs at 300dpi and add them to ads, brochures, and catalogs, or use them to spice up your web site.

The Astra 600S comes as a complete scanning system, with Adobe PhotoDeluxe for scanning, editing, and printing photos; Presto! PageManager for converting text; Windows 3.1, Windows 95, Windows NT & Mac drivers; and a SCSI-2 adapter card and cable.

Umax Astra 600S Complete Scanning System (Reg. $299) $198
Umax Astra 600S System with Adobe Photoshop 4.0 .... $499



Umax Astra 1200S

Now Just $398!

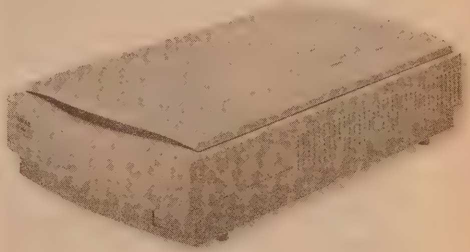
Great resolution and color quality

PC Magazine says "Business and personal users need an easy-to-use device that will handle both document scanning and color scanning at an affordable price. For those users we recommend our Editors' Choice, the UMAX Vista-S12 ($500 street). The combination of value and performance delivered by the 24-bit, 600-dpi Vista was unparalleled in this roundup."

Now the S12 has been upgraded to the Astra 1200S, with the same great color quality *plus* a legal-size bed and a true 30-bit scanning process. These features make it an even better value at the same price!

The Astra 1200S comes with the same great software bundles as the other Astra scanners, and includes Windows 3.1, Windows 95, Windows NT & Mac drivers; and a SCSI-2 adapter card and cable.

Umax Astra 1200S Complete Scanning System (Reg. $499) $398
Umax Astra 1200S System with Adobe Photoshop 4.0 .... $598



Umax Gemini D16

Now Just $598!

Great resolution and color quality

It's not too late to get your hands on a Umax Gemini D16 scanner, a longtime favorite of graphics pros because of its high-powered 800dpi maximum optical resolution and 30-bit color. Envisions bought the last batch of Geminis the Umax factory ever made, and now we're closing them out for just $598. Because of their sophisticated dual-lens design, these units can scan a whole page at 400dpi at top speed, or a detailed color photo at 800dpi.

The Gemini D16 Scanning System includes Adobe Photoshop LE; Umax MagicScan drivers for Windows 3.1, Windows 95 & Mac; and a SCSI-2 adapter card and cable. Hurry, when these Geminis are gone, they're gone forever!

Umax Gemini D16 Complete Scanning System (Reg. $999) $598
Umax Gemini D16 System with Adobe Photoshop 4.0 .... $798

---

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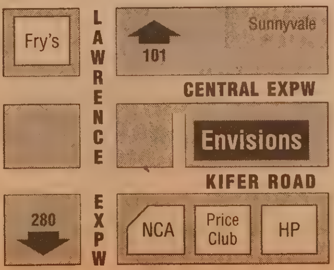
Some software is on CD-ROM with online manuals; disks & printed manuals available separately. Photos for illustration only. Rebates offered by manufacturer, not Envisions; please allow 6-8 weeks for processing. Clearance units may be factory-serviced. Returns must be authorized by Envisions, and must be in as-new condition. Products & prices subject to change. © 1997 Envisions Solutions Technology, Inc. All rights reserved and trademarks acknowledged.



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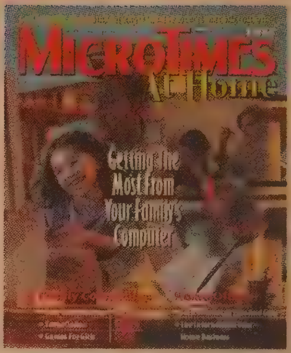

Our cover for this Fall's *MicroTimes At Home* issue featured a fine photo illustration by Michael Jay, whom we inadvertantly neglected to credit. Michael is a freelance photographer based in the East Bay and can be reached at (510)652-0919, URL: *http://home.earthlink.net/~jayphoto/* .
Our sincere apologies to Michael for this omission.

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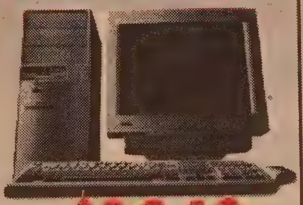

- Intel Portland Motherboard (Slot 1)
- Intel Natoma 440FX Chipset
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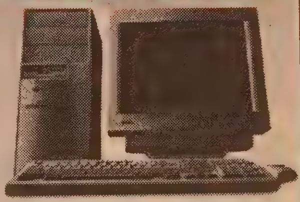
- Intel CPU Pentium® II 266MHz
- CPU Cooling kit w/ Heatsink & Fan (Ball Bearing)
- 64MB EDO 60ns RAM Installed
- EIDE Controller 4HD & 2FD w/2s (16550), 1P (EPP)
- Floppy Drive 1.44MB
- Hard Drive 4.0GB EIDE (WD-34000)
- Diamond Stealth 3D 3000 PCI w/4MB VRAM
- 17" Impression 7 Plus Color Monitor (1600x1280) 27 NI
- Keytronic 104 Keys PS-2 Enhanced Keyboard
- ATX Mid Tower Case w/ P.S
- Microsoft PS2 Mouse
- 24X CD-ROM Drive
- Yamaha OPL Sound (On-Board)
- Pair of Speakers (Yamaha YST-M15)
- Windows 95 CD-ROM Pre-loaded Full Version (CD & Manuals)

$2649

MULTIMEDIA 233MHz MMX PERFECT HOME SYSTEM

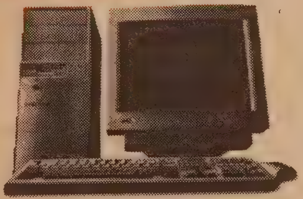


- Intel Anchorage Pentium® M/B w/Yamaha Sound
- 512K Pipeline Burst Cache
- PCI EIDE & Floppy Controller
- Hi-Speed Serial Ports & Parallel Port
- 32MB SDRAM
- 2.5GB EIDE Hard Disk
- 1.44MB Floppy Drive
- 24X CD-ROM, 160W Speakers
- 64-Bit 3D w/MPEG 2MB PCI Card
- 56K Internal Voice Modem
- Medium ATX Tower Case w/Power Supply
- Microsoft Mouse, 104 Keyboard
- Windows 95 CD & MS Plus Full Version
- Monitor sold separately

MMX 233MHz $1499

150MHz	$1175
166MHz MMX	$1234
200MHz MMX	$1345
233MHz MMX	$1499

BEGINNER SYSTEM

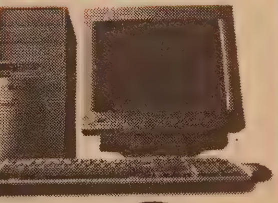


- Pentium® PCI Intel 430VX Chipset Mainboard
- 512K Pipeline Burst Cache
- PCI EIDE & Floppy Controller
- Hi-Speed Serial Ports & Parallel Port
- 16MB EDO RAM 60ns
- 1.6GB EIDE Hard Disk
- 1.44MB Floppy Drive
- 16X CD-ROM Drive
- 16-Bit Sound & 60W Speakers
- 2MB PCI Card w/MPEG
- Mini Tower Case w/Power Supply
- Microsoft Mouse, 104 Keyboard
- Windows 95 CD & MS Plus Full Version
- Monitor sold separately

150MHz $799

166MHz MMX	$869
200MHz MMX	$969
233MHz MMX	$1109

PENTIUM® PRO 200



- Intel Venus Pentium® Pro Mainboard
- Intel Pentium® Pro 200MHz Processor
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- Hi-Speed Serial Ports & Parallel Port
- 32MB EDO RAM 60ns
- Western Digital 3.1GB EIDE Hard Disk
- Teac 1.44MB Floppy Drive
- Toshiba 24X CD-ROM Drive
- Matrox Millennium II 4MB WRAM PCI Card
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- Improves SCSI Bus Performance
- Less Errors; More Reliable Data Transfer
- Diagnoses Problems • Analyzes Signal Quality

Features:
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- Status Indicators • Gold Contacts

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From: $599

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- Share Devices Between 2 Computers

Features:
- 2-1 Active Digital Switch/Repeater
- Regenerates SCSI Signal for Long Runs

Gold Diagnostic Adapters

Styles: Gender Changers
- Both 50 pin and 68 pin (all combinations)

: 68 pin Drive to 50 Bus
68 Pin Drive to 50 Pin IDC (runs wide drive as narrow)

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Styles: 68 Pin Adapter Wide to 50 Pin Narrow
- 68 Pin External Adapter to 50 Pin (converts Host Adapter)

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68 Pin to 50 Pin Centronics or 50 Pin MicroD Adapters

Styles: For Adaptec Ultra Wide Cards
- Adapters with partial termination built in for 68 to 50 converters (converts Host Adapter)

SCSI Vue Gold Diagnostic Cables

Features:
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- Large Ferrite Filters
- Triple Shielding (Unique Design)
- Double Gold 20u" Plated Connectors
- Extra Heavy 26 Gauge Wire • 100 Styles in Stock

From: $39

Benefits:
- No Loss Of Important Data
- Faster Performance
- Test Cable Integrity

Teflon® External 90 Ohm SCSI Cables

From: $159

Features:
- Perfect 90 Ohm Impedance Match
- Triple Pronged Connector With Gold contacts

Custom Teflon® Int. Cables

Teflon® is a registered trademark of DuPont

Benefits:
- Less Errors, Ultimate Performance
- Silver Wire Improves Signal Quality

Features:
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- Triple Pronged Connector - Gold contacts Silver Wire

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- 50 pin IDC
- 68 pin MicroD

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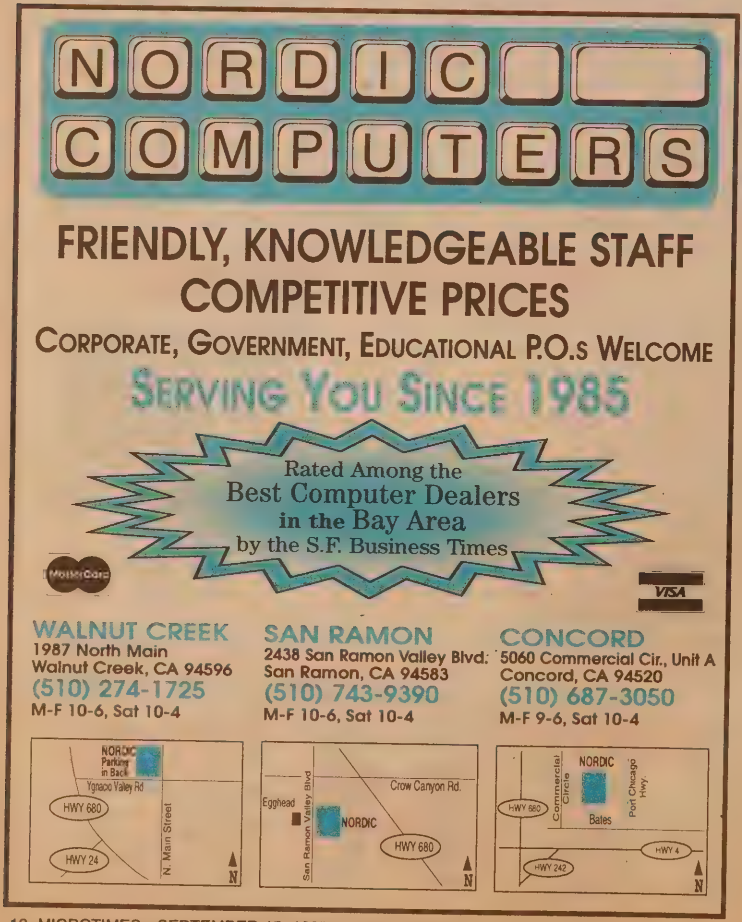

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Pentium® 150MHz	**560**
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- •Intel "Portland" Motherboard
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- •512K Cache
- •Intel CPU Pentium® II 233MHz
- •24X CD-ROM
- •32 MB EDO RAM
- •2.5GB IDE Hard Disk
- •1.44 MB Floppy Drive
- •Matrox Mystique II w/4MB SGRAM
- •Yamaha Sound Card
- •ATX Mid Tower Case w/230W PS
- •Win 95 Keyboard
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Pentium® 266MHz	**1725**

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- •16 MB EDO RAM
- •1.2 GB Hard Drive • 1.44 MB Floppy Drive
- •PCI SVGA w/1 MB to 2 MB
- •Mini Tower Case w/230W PS
- •104 Win 95 Keyboard, Mouse
- •14" .28 NI SVGA Monitor
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Pentium® 166MHz	**520**
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- •PCI EIDE w/256K High Speed Controller
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- •1.44 MB Floppy Drive
- •PCI 64-bit SVGA Card/1 MB RAM (to 2 MB)
- •104 Key Win95 Keyboard
- •Mini Tower Case
- •230 Watt Power Supply

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AMD K6-200	**579**
AMD K6-233	**679**

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K6-200MMX	**989**
P-200MMX	**995**
P-233MMX	**1135**

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Tyan Tahoe ATX P-II Intel 430TX Chipset	$139
ASUS Pentium® P55T2P4S AT/512K	$149
ASUS Pentium® TX97E ATX/512K	$159
ASUS Pentium® TX97-XE ATX/512K	$169
ASUS Pentium® II 233-266 KN97X/ATX	$249

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Pentium® Pro 200MHz	$499
Pentium® II 233/266MHz	$556/695
AMD K6 200/233MHz MMX	$266/335
16MB EDO 60ns	$51
32MB EDO 60ns	$99
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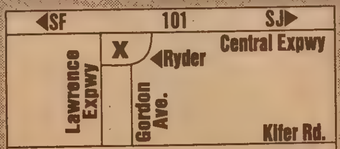

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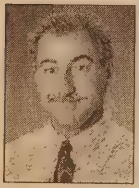
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Warren is one of the named plaintiffs in the constitutional challenge against the Communications Decency Act, that was overturned in June, 1997, by the U.S. Supreme Court.

He founded InfoWorld, was founding host of PBS' *Computer Chronicles*, founding editor of *Dr. Dobb's Journal* and served half a decade on the Board of Directors of Autodesk, Inc.

He has received the Hugh M. Hefner First Amendment Award (1994), James Madison Freedom-of-Information Award from the Society of Professional Journalists—Northern California (1994), the Electronic Frontier Foundation Pioneer Award (1992, its first year) and the John Dvorak Lifetime Achievement Award (1995).

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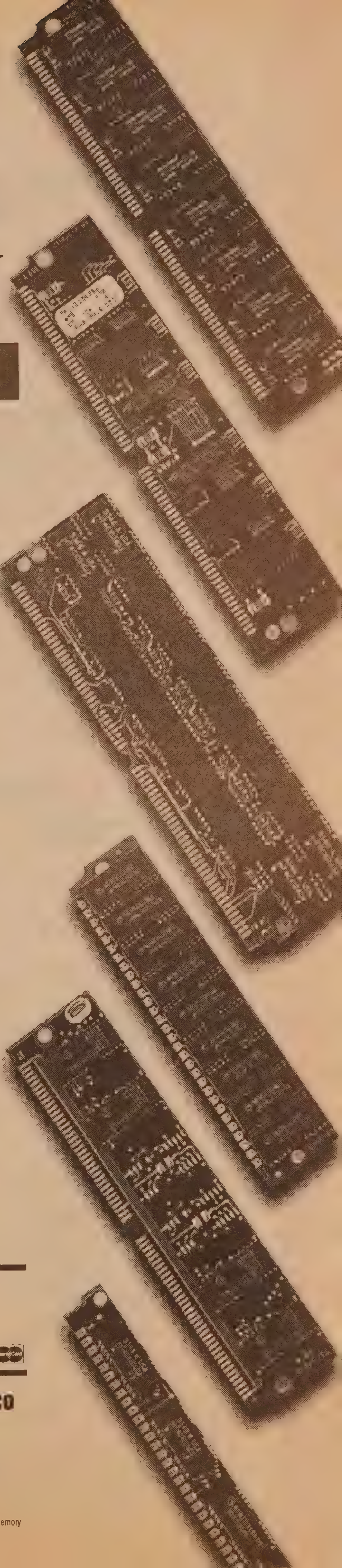

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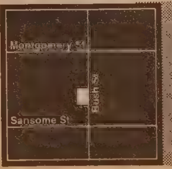

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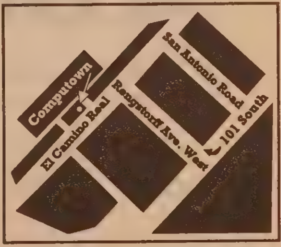

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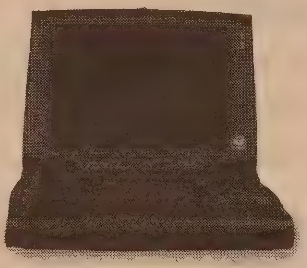

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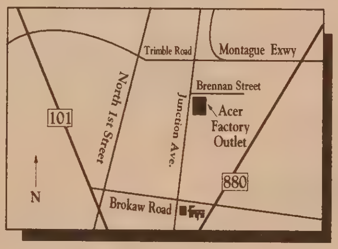

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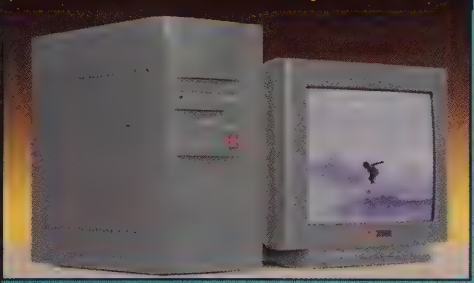

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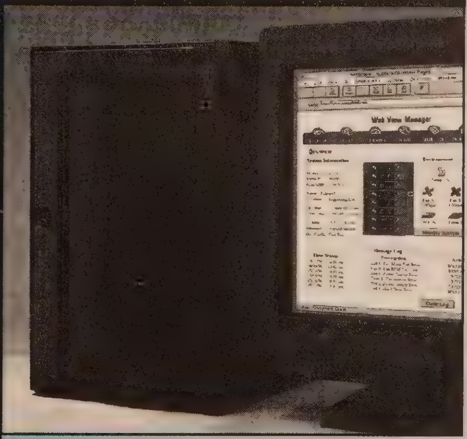

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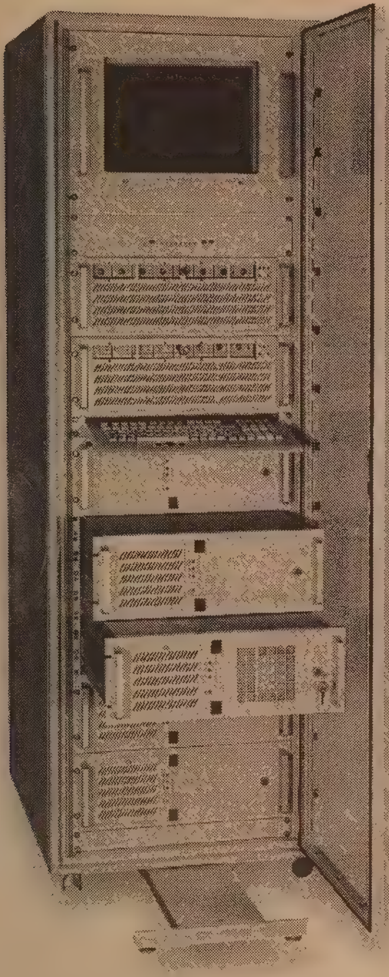

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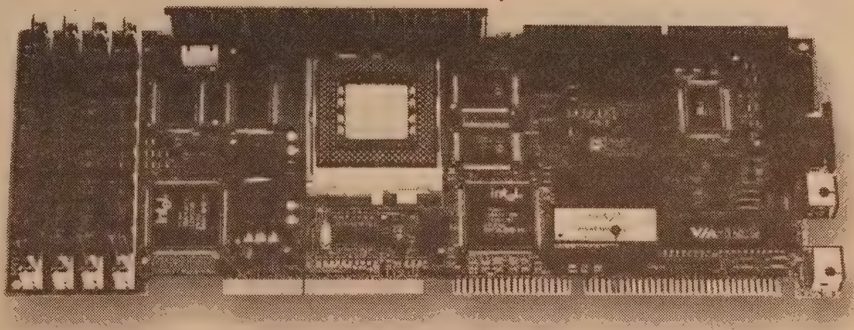

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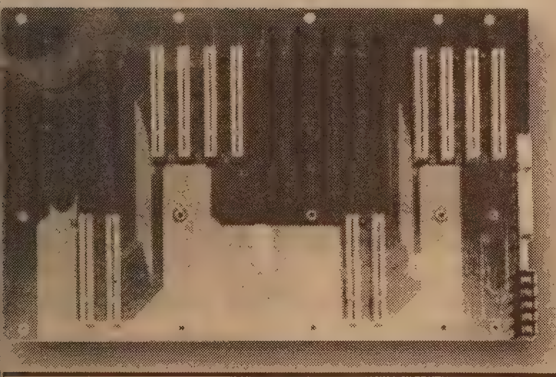

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BY PAUL HOFFMAN

Industry Insights

How The Computer Industry Keeps Missing The Mark

A computer-industry Rip Van Winkle would not have a hard time if he had gone to sleep in mid-1987 and woke up today. PCs still have pretty much the same architecture, and they are sold to pretty much the same people. Sure, there are more computer users now than a decade ago, but they are by and large in the same markets and doing about the same tasks. The only big change has been the addition of the Internet.

In order to convince investors to buy their stocks, personal computer makers have kept making market predictions that have yet to come true. "Home buyers will love multimedia computers!" "The Internet will bring in a huge number of new PC users!" And so on.

Today's computers are essentially the same as they were before the predictions, meaning that the computer industry thinks that it doesn't have to change anything, just give people more interesting things to do with their computers. As the tens of millions of non-computer users can tell you, this just ain't so. In order to get them interested, PC makers have to come up with very different computers that are cheaper and easier to use.

New Chips May Help Drop Home PC Prices

Two recent events may help change the price problem. Cyrix, one of the major sellers of Intel-compatible CPUs, was bought by National Semiconductor, one of the major sellers of the support chips needed in PCs to connect the CPU to devices such as keyboards, floppy drives, and so on. The combined company will have a new competitor in SGS-Thompson, which just released a new, very low cost Intel-compatible CPU that includes many of the functions usually relegated to additional chips, particularly the ability to display directly on televisions.

The National Semiconductor-Cyrix deal is not expected to create any new chips immediately, but it will allow Cyrix to create cheaper chips than they are currently able to make. It will also allow Cyrix to get faster chips into the hands of PC makers faster because they can cut their testing time. Currently, Cyrix relies on IBM as its chip manufacturer, and IBM has not put Cyrix's production needs on a high priority. Being part of National Semiconductor means that Cyrix will be able to get its manufacturing needs met much more easily.

The new CPU from SGS-Thompson, called the STPC, is more likely to cause the industry to try to make new, low-cost PCs. The STPC integrates a 486-like CPU that is licensed from Cyrix, with a small cache and many interfaces (e.g., for video and hard disks). The chip, plus one easily-available support chip and some RAM, can create an entire computer on a tiny card that really can't be called a "motherboard" any more.

One of the STPC's best features is that it directly supports video output to both NTSC and PAL television systems. It also handles video input. Although PC display on televisions is problematic because of the low resolution of TV screens, it is by no means impossible. Since at least $200 of the price of any new PC is for the monitor, a home computer that hooks directly

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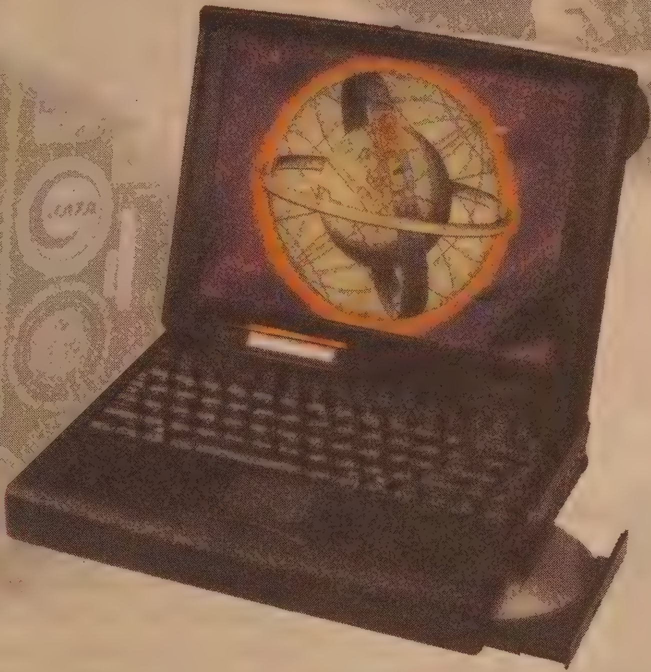

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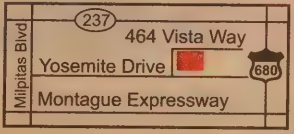

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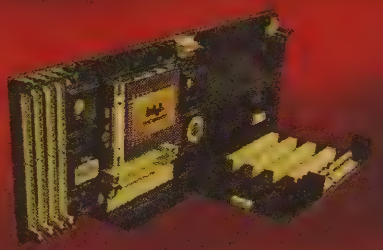

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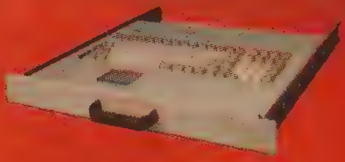

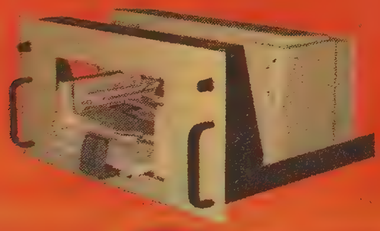

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into the television would automatically be much cheaper than typical home PCs. Those of us old-timers who remember personal computers in the late 1970s know the limitations of this, but also remember that you could still get reasonable results with some creativity.

Speed Isn't Everything

Press reports about the STPC said that the CPU was "underpowered for desktop computers," even though millions (if not tens of millions) of people are currently using 66MHz 486 PCs for everything from word processing to, yes, accessing the Internet. True, the STPC is probably underpowered for running the current version of Netscape on Windows 95; however, that doesn't mean that it can't be used to run more modest programs on more stripped-down operating systems like MS-DOS. Further, SGS-Thompson expects to be shipping CPUs that are twice as fast as the current model within a year.

A $300 PC that hooked into the family television set and gave basic word processing, checkbook balancing, email, and Web access would be a sure winner. Even at $500, it could still sell millions of units. With the STPC, the manufacturing costs would be very low and such a computer can be easily designed and manufactured.

Given how poor the Windows interface is for novice users, a manufacturer of this kind of system should definitely look into basing their software on MS-DOS with a simple windowing system attached onto it. There are tens of thousands of MS-DOS programs available, and many have been tailored quite well to the novice and home market. Given the number of MS-DOS clones and other Intel-based microkernel operating systems available, the software for such a home device should be quite easy to assemble.

Fewer Chips Means Smaller Computers

The reasons that people are not buying today's PCs for home use go well beyond cost. Another item repeatedly brought up in consumer focus groups is the size of computers. Not that many people want to devote an entire desktop to a computer, or even to a monitor and keyboard combination. Even so, there are extremely few PCs that do not use the typical large-sized case and full-sized monitor.

We're not talking just the home market here. While typical office workers in the US often have enough space for a typical PC, offices in other parts of the world are much more crowded and desk space is at a premium. Also, there are many corporate workers who don't really have a "desk," but instead have a work area that is smaller than a typical cubicle, so these people would not do well with a full-sized PC.

The STPC chip (and earlier but less-integrated designs from CPU maker AMD) makes such a system easy to build. There's no reason that a

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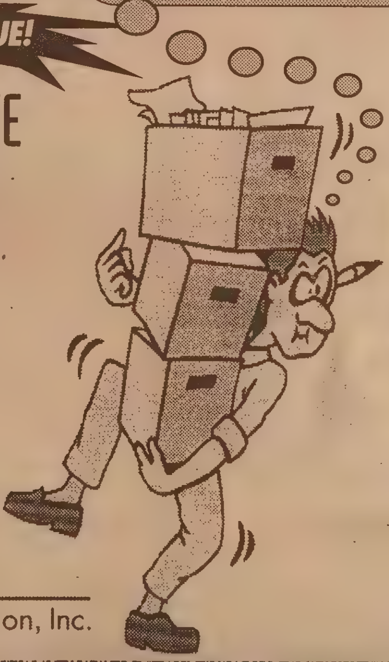

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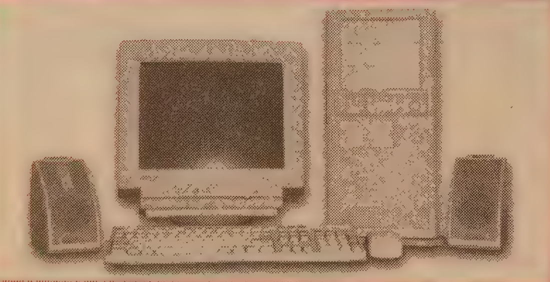

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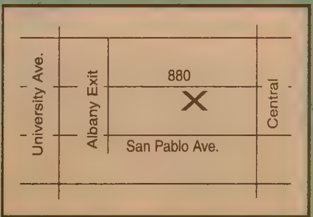

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simple PC with no expansion slots based on such a design would have to be larger than a phone book, and could conceivably be the size of a large-format paperback. Because Internet access is becoming a requirement, such a PC should have either a modem or an Ethernet adapter built into the system. This is really no problem because either component takes just a few chips; look how small the cheapest modem and Ethernet add-in cards have become.

Note that you need to do more than make the computer case small for a computer to be small. The monitor is usually the thing that takes up so much space on a desk. Oddly, very few LCD monitors are being manufactured, and those that are are hilariously overpriced. In fact, you can often buy a full laptop computer with the same LCD at a lower price than you can today's LCD monitors, proving that the computer industry really hasn't thought much about this market.

One company is making waves by making smaller, cheaper PC clones. Monorail PCs are essentially LCD monitors with PCs built into them. The result is a computer with a very small footprint (although the keyboard is full-sized), with all the readability and usefulness of a typical PC laptop. The prices are comparable to name-brand PCs with the same features.

Could It Be Apple? Probably Not

Did you really think I would make it through this whole article without talking about the turmoil at Apple? Although Apple has the image of being the bold innovator, its corporate problems are likely to keep it away from any ground-breaking steps into the low-cost market any time soon. This is too bad, because in the past, Apple has proven to be a good listener to the K-12 educational market.

Instead of coming out with new computers that are attractive to new markets, Apple's current plan is to keep making computers similar to what it makes now for the same markets. In fact, it appears that Apple is also going to prevent other companies from offering Macintosh-compatible computers into new markets. Apple has gone out of its way to make life hard for Mac clone makers, even though these are the very companies that have breathed life into the Mac market over the last year while Apple has floundered. Restricting the clone makers would be an incredibly myopic move for Apple, but this is the path they appear to be on.

This is not to say that Apple has no innovation left in it. In fact, the ill-fated Newton is a great example of Apple thinking about how to miniaturize and make a computer easy to use. Unfortunately, Apple has all but killed the Newton's market by pricing it so high. In the interim, US Robotics has created a great market for the PalmPilot, which, while being less capable than the Newton, costs so much less that they don't even compete in the same market. Even Mac zealots are buying the PalmPilot in droves and ignoring the Newton.

But it's likely that the more exciting announcements that will attract new markets will not come from Apple, or IBM, or Compaq. None of these companies has shown much innovation in the past few years. Instead, look to small startups who have good funding for their manufacturing to be the next innovators. The parts are there, and the unfulfilled needs are there; it just takes the same kind of innovative spirit that launched Compaq and the Macintosh. ■

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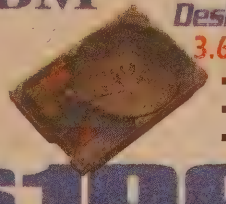

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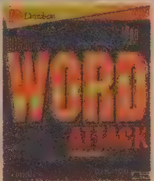

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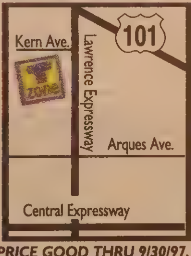

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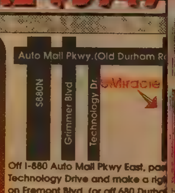

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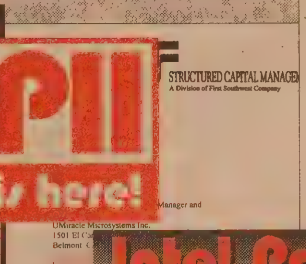

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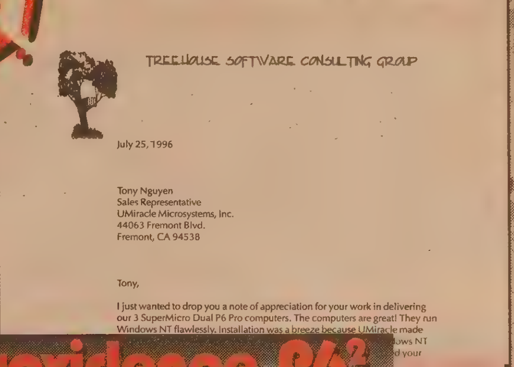

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	Single	Dual
180MHz 256k	$3178	$3395
200MHz 256k	$3469	$3976
200MHz 512k	$4018	$5074
200MHz 1MB	$Call	$Call

ntel DK440LX PII Dual

tel DK440LX Dual Pentium II Motherboard 82440LX AGPset -
33Mhz & above Dual CPU support, 440LX AGPset w/ Accelerated
raphics Port Connector for optimal Video Graphics.4 DIMM
ots,Onbrd I/O,UltraDMA PCI IDE,onbrd Intel Pro10/100BT Ethernet/
daptec 7895 Dual Channel SCSI w/ RAIDport slot
tel Pentium® II 512K Processor(s) w/ Cooling Fan(s)
4MB 168Pin 12ns SDRAM DIMM
.44MB Floppy Drive
.2GB Quantum FireBall ST33260S Ultra-SCSI-2 HD
EC 16xSpeed IDE 2400KB/S CD-ROM
TI 3D ProTurbo PC2TV 8MB SGRAM Video Card
9" Hitachi CM-751MU .22DP 1600x1200NI Monitor
remium ATX style Full Tower 235W ATX PS
ton SK6000 Ergonomic Win95 Keyboard
ogitech 3-Button MouseMan Serial Mouse w/ Pad
air of 120Watt Stereo Speakers
egitimate MS Windows NT V4.0 Workstation CD
+ Manual + installed + fully-configurea

Single Pentium II

233MHz	$3313
266MHz	$3470
300MHz	$3854

Dual Pentium II

233MHz	$3862
266MHz	$4175
300MHz	$4944

NoteBook Options:		
	MS DOS V6.22 + Windows V3.11	Add$100
	MS DOS V6.22 + WFWG V3.11	Add$120
	Windows 95 CD Full OEM Version	Add$90
	Windows NT 4.0 Workstation/Server OEM	Add$145/$550

CHEM 9750 NoteBook Options

EDODIMM 16MB=8X2pc	$105
EDODIMM 32MB=16X2pc	$205
Auto Adaptor 12V	$75
AC Adaptor	$75
NiMH 2nd Battery	$105
Li-Ion 2nd Battery	$215
Battery Charger	$95
Port Duplicator	$130
Upgrade to 16x CDROM	$60

Harddrive/Accessories

1.4GB 2.5" IDE Slim HD	$215
2.1GB 2.5" IDE Slim HD	$325
3.0GB 19mm IDE Slim HD	$565
PCMCIA 33.6 Fax/Data	$129
PCMCIA Ethernet Comb	$85

MULTIMEDIA NOTEBOOKS

FD replaceable w/2nd Battery
Upto 64MB EDO memory
Large 12.1" Active Color
Built-in 11x CD ROM
RCA Jack for TV Output
Lithium-Ion Battery Included

EMBOOK 9750 ■ P5 CPU upto 200MHz ■ Active Screen 12.1"/13.3"
MB EDO onbrd ■ 256K PB L2 Cache ■ 1.44FD ■ 10xSpeed CDROM ■ 2MB EDO Video RAM
ion Battery ■ 16Bit Stereo Sound ■ Video Capture Port ■ IS/IP ports ■ InfraRed port ...

/2.1/3.0GB HD)	Active Matrix 12.1"	Active Matrix 13.3"
5-133Mhz	$2222/$2318/$2530	$2816/$2911/$3124
5-166Mhz	$2268/$2363/$2575	$2862/$2957/$2991
5-200Mhz	$2340/$2436/$2648	$2934/$3030/$3242

for Intel Pentium 166/200MHz MMX Upgrade.

CHEM 6800 SPECIFICATIONS

- Intel Pentium 100/120/133/166/200MHz
- Pipelined Synchronous 256K Level-2 Cache
- 12.1" Active Matrix Screen
- 2MB EDO Video RAM on PCI v2.1 Bus
- Expandable EDO Memory up to 64MB
- 800x600x16M True Colors
- 64Bit PCI bus with graphics accelerators
- SystemSoft flash BIOS with Plug & Play
- Built-in 11X CD-ROM
- 16Bit Stereo sound System
- 3 x Type II or 1 x Type II+1 x Type III (Support Zoom Video Port)
- Modem Ring in wake up on Power Mgmt
- Built-in 1MB Mask ROM hardware wavetable
- Removeable Floppy & hard drive
- Infra-red IrDA and FIR
- RCA jack for TV-Out
- Windows 95 Keyboard

ge 13.3" Active Color
deo Capture Port Built-in
hium-Ion Battery Included

FD Replaceable w/2nd Battery
Upto 80MB Main Memory

CHEM 9750 SPECIFICATIONS

- Intel Pentium 120/133/150/166/200MHz/MMX
- 13.3" TFT XGA/12.1" TFT SVGA
- 16MB Memory onbrd, expand upto 80MB
- 800x600x16M True Colors, 2MB Video RAM
- 64bit PCI bus graphics accelerator
- SystemSoft Flash BIOS with PnP
- 10Xi CD ROM, exchange w/FDD or Battery
- 16Bit Stereo Sound System
- Pipelined Synchronous 256K Level-2 Cache
- Infra-red IrDA and FIR
- Video Capture port
- Windows 95 Keyboard

HEM BOOK 9750

CHEM BOOK 6800

CHEMBOOK 6800 ■ P5 CPU ■ Active 12.1"
■ 16MB EDO 144DIMM ■ 256K L2 P.B. Cache
■ 1.44FD ■ 11X CDROM ■ 2MB EDO Video
■ TouchPad ■ 16Bit Stereo Sound ■ RCA Jack
■ IS/IP ports ■ Li-Ion Batt ■ InfraRed port ...

Active Matrix 12.1"(1.4/2.1/3.0GB)	
■Pentium-133Mhz	$2222/$2318/$2530
■Pentium-166Mhz	$2268/$2363/$2575
■Pentium-200Mhz	$2340/$2436/$2648

CHEM 6800 Notebook Options

16MB=16x1 144Pin EDO	$105
32MB=32x1 144Pin EDO	$195
Auto Adaptor 12V	$75
AC Adaptor	$80
Li-Ion Internal Battery	$205
Battery Charger	$95

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What is RAID?

RAID is an acronym for Redundant Array of Inexpensive (or Independent) Disks. A RAID array is a collection of drives which collectively act as a single storage system, which can tolerate the failure of a drive without losing data, and which can operate independently of each other. Among all RAID implementations, RAIDport, the latest Adaptec RAID 5 solution, is the most cost-effective way to protect your data. If the data in your file server is vital to your survival of your business, RAID-5 is the way to go!

RAID-5 Pentium Pro² Server

- IWILL DP6NS Dual Pentium® Pro processor-based board w/Built-In Adaptec® PCI SCSI chipset 7880 (AHA-2940UW Ultra Wide SCSI), 50Pin Fast SCSI-2 & 68Pin Ultra Wide SCSI (40MB/s Burst) with optional RAID support, Intel 440FX chipset, ZIP Socket 8, 150-233Mhz, 3 PCI+4 ISA slots, FP or EDO 72Pin SIMM & support upto 512MB, built-in PCI-IDE interfaces, FD, 2-16550 UARTs, ECP/EPP, support 4 IDE HDs, PnP, 50pin SCSI + 68pin Wide SCSI + FD/HD/IO cables, PS/2 mouse port & EZ-SCSI V4.0L + complete Adaptec® software driver & manual included
- Adaptec AAA-131 RAID 5 Ultra-Wide Adapter with 1MB Cache onbord
- Genuine Intel Pentium® Pro Processor(s) w/ Cooling Fan(s)
- 32MB=16MBx2 60ns 72Pin EDO SIMM RAM
- 1.44MB Floppy Drive
- NEC 16XSpeed IDE 2400KB/S CD-ROM
- Four 3.2GB Quantum FireBall ST33240S Ultra-SCSI-2 HDs
- Trident 9680 PCI 1MB MPEG+AVI Video Card
- 14" ShamRock 1Kx768NI Pwr-Saving Monitor
- GigaStar ATX style Full Tower 235W ATX PS
- KeyTronic 104 Key Win95 PS/2 Keyboard
- MicroSoft Ergonomic Serial Mouse w/ Pad

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P6² is here!

	Single	Dual
180MHz256k	$3283	$3499
200MHz256k	$3573	$4079
200MHz512k	$4132	$5197
200MHz1mb	$Call	$Call

RAID-5 AMI Quad P6

- AMI (American Megatrends, Inc) Goliath Quad Pentium® Pro Processor EISA/PCI motherboard - U.S. designed & made 180/200MHz (or higher) 1/2/4 processors supported, easy processor upgrade thru CPU based board approach, 1GB memory max onboard with 168pin slots, 4 way Interleave structure for max performance ECC supported, 168Pin DIMM supported, Intel 82450GX chipset, AMI Green Flash BIOS, 6 PCI + 4 EISA slots, integrated I/O w/ 1P/2S/FD/2 PCI IDEs/PS2 mouse
- Genuine Intel Pentium® Pro Processor(s) w/ Cooling Fan(s)
- 64MB=32MBx2 168Pin 4Mx72 EDO ECC Buffered DIMM
- 1.44MB Floppy Drive
- NEC 16XSpeed IDE 2400KB/S CD-ROM
- DPT SmartRAID IV RAID-5 Ultra-Wide SCSI-3 PCI 2 channels with 8MB parity cache memory for speedy performance
- Five 3.2GB Quantum FireBall ST33260S Ultra-SCSI-2 HDs
- Trident 9680 PCI 1MB MPEG+AVI Video Card
- 14" ShamRock 1Kx768NI Pwr-Saving Monitor
- Heavy-Duty Server Case Model LT-18 supporting 11 drive bays, 26"x10"x25", removable front & side doors, Lockable front door for security, "snap-in" drive mounts, swing-out feet
- 400W AT Size Power Supply special-designed for AMI Goliath with 12V/5V/3.3V DC output
- KeyTronic 104 Key Win95 PS/2 Keyboard
- MicroSoft Ergonomic Serial Mouse w/ Pad

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P6⁴ is here!

ULTRA WIDE
40MB/s Ready!!!

Intel Pentium® Pro
Dual 200MHz 256/512k
$9339/$10498
Quad 200MHz 256/512k
$11546/$13863

LOOKING FOR YOUR DREAM MACHINE AT THE CHEAPEST PRICE? SHOPPING FOR A PC IN THIS RAZOR-THIN-PROFIT INDUSTRY IS DANGEROUS BECAUSE 70% OF THE DEALERS WON'T LIVE TILL THE FOURTH YEAR IN BUSINESS, MOST SELL 3 OR 4 MACHINES A WEEK WITHOUT KNOWING WHAT THEY ARE SELLING AND 99% DON'T WANT TO SEE ANY MACHINE COMING BACK AFTER YOU WALK OUT OF THE DOOR. AT UMIRACLE, WE BUILD HUNDREDS OF PC'S EVERY WEEK, WE TEST EVERY POSSIBLE COMBINATIONS OF SOFTWARE AND HARDWARE FOR COMPATIBILITY, AND WE STAND BEHIND YOUR PC'S LIFETIME LONG! WHY? BECAUSE WE LOVE YOUR PC AS MUCH AS YOU DO! COME BY AND VISIT ONE OF OUR STORES AND YOU WILL FIND OUT WHY YOU WILL BE THE WINNER!

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Thunder 2 Dual PII

- TYAN Thunder-2 ATX S1696DLUA Dual Pentium II 233-300 MHz System Board - 1 AGP+5 PCI+2 ISA Slots, 4 168Pin DIMM for Max 1GB, Onbrd Adaptec dual channel U-Wide SCSI with RAIDport option, Yamaha PCI Wavetavle sound, Super IO/FD/IDEs/USBs/PS2, Flash AMI BIOS
- Intel Pentium® II CPU(s) w/ Cooling Fan(s)
- 64MB 168Pin 12ns SDRAM DIMM
- 1.44MB Floppy Drive
- Three 3.2GB Quantum FireBall ST33260S Ultra-SCSI-2 HDs
- NEC 16XSpeed IDE 2400KB/S CD-ROM
- Trident 9680 PCI 1MB MPEG+AVI Video Card
- 14" ShamRock 1Kx768NI Pwr-Saving Monitor
- GigaStar ATX style Medium Tower 235W ATX PS
- KeyTronic 104 Key Win95 PS/2 Keyboard
- MicroSoft Ergonomic Serial Mouse w/ Pad

Legitimate MS Windows NT 4.0 Server CD
+ Manual + installed + fully configured

Single Pentium II	
233MHz	$3133
266MHz	$3294
300MHz	$3679

Dual Pentium II	
233MHz	$3677
266MHz	$3997
300MHz	$4769

NT ENHANCEMENTS

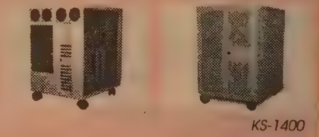
NT Guaranteed! All hardware listed below are guaranteed to be NT V4.0 compatible. We will make it right or your money back!

- **Memory**
  - *16/32/64/128MB 10ns SDRAM UnBuffered 168Pin DIMM for 430VX/TX .... $Call*
  - *16/32/64/128MB 60ns DRAM ECC EDO Buffered 168Pin DIMM for 440FX .... $Call*
- **RAID 5 Fast Ultra Wide SCSI-2 Host Adapter (for RAID-5 implementation, an IDE HD as boot drive is recommended)**
  - *DPT SmartCache IV SCSI Adapter & RAID Series/SmartRAID IV RAID Series .... $Call*
  - *Mylex DAC960 Series Hi-Performance PCI RAID Controller with upto 3 UW SCSI channels supporting 45 HDs, upto 64MB Cache installable .... $Call*
  - *AMI Complete MegaRAID Solution including:SCSI RAID level 0,1,3,5,10,30, and 50 PCI Disk Array Controllers/FlexRAID/Advanced Management Software/Advanced Enclosure Management/Boot-Up Configuration/Power Console/General Alert .... $Call*
- **TapeDrive - HP DADDS/DDS-2 Drive (Sold & integrated with system only)**
  - *HP DAT C1534 DDS DAT Tape Drive (2GB on 90m Tape) $540*
  - *HP DAT C1536 DDS DAT Tape Drive w/DCLZ Hardware Compression (4GB on 90m Tape with compression) $605*
  - *HP DAT C1599A DDS-2 DAT Tape Drive w/DCLZ Hardware Compression (8GB on DDS-2 format with compression) $779*
  - *HP DAT C1553A DDS-2 Autoloader w/DCLZ Hardware Compression (48GB on DDS-2 format with compression) $2010*
  - *Seagate 32GB DAT DDS-2 Autoloader 4586NP (4 DAT Tape Support) $1235*
  - *Optional 12 Tape Magazine for above 4586NP upto 96GB (no tape) $135*
- **High End Video Card - 3D Rendering/Graphic Animation/OpenGL**
  - *Symmetric GLyder MAX/TX-16/TX-40/MP-40 3D Accelerator .... $520/$1790/$2245/$2520*
  - *Dynamic Pictures OpenGL Accelerator Oxygen102/202/402 .... $985/$2075/$3655*
- **Server Chassis (T-101)/Disk Array Chassis (T-103): Dimension=13"x31"x22" w/Dual Redundancy & Hot Swappable Power Supplies .... $880/$880**
  - *T-101: 12 DriveBays/Upto 2 PowerSupply 2x300W 2x4.6" Smart Fans w/ Efficient Air Flow Full Size AT Motherboard FormFactor*
  - *T-103: 16 DriveBays/Upto 2 PowerSupply 2x300W 2x4.6" Smart Fans w/ Efficient Air Flow Perfect RAID Disk-Array Sub-Chassis*

- **Server Chassis LT-18 By Axxion w/o Power Supply....$80**
  - *Full-size AT, Baby AT, oversize AT based boards, 11 drive bays (one 3.5" and four 5.25" exposed, six 5.25" hidden bays). Twelve slots, "snap-in" drive rails, secondary cooling fans, accepts standard power supply.*
  - *Dimensions: 26" x 10" x 24.5" (DxWxH).*

LT-18 by Axxion

- **Server Enclosure KS-1400 w/ Dual Redundant Hot-Swappable 300Wx2 PS....$70**
  - *Full-size AT, Baby AT, oversize AT based boards, 14 5.25" drive bays, Twelve slots, "snap-in" drive rails, 8 cooling fans,*
  - *Dimensions: 20.5" x 16.25" x 23.75" (DxWxH)*



KS-1400

- **CD-ROM Tower Subsystem Chassis**
  - *7 Plextor 20X PX-20TSI w/250W PS $2039*
  - *7 Toshiba 15X XM-3801B w/250W PS $1255*
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  - *APC SmartUPS 650VS 650VA 5 minute Full 11 Minute Half load 4 outlets $325*
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Compatibility Guaranteed

Call for your preferred hardware not listed above

Windows NT 4.0 Server/Workstation

Albany Store
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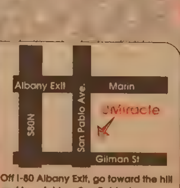

Off I-80 Albany Exit, go toward the hill and turn right on San Pablo Avenue. We are facing U.C. Village. Or off I-80 Gilman St, go toward the hill and make a left turn on San Pablo Ave.

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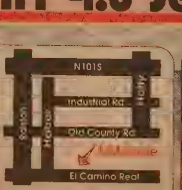
Mon to Sat 9:30AM-6:00PM
Sunday 10:30AM-6:00PM
Yes! Open on Sunday



From north or south, Off I-101 Ralston Ave, go towards west, left on El Camino Real and make a U-turn ASAP. We are on your right.

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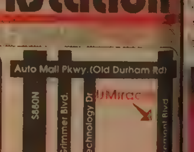

Off I-880 Auto Mall Pkwy East, past Technology Drive and make a right on Fremont Blvd, (or off 680 Durham, go west, pass Osgood Rd, then make a left on Fremont Blvd.) first driveway on your right.

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Motherboard without CPU (Call for CPU Prices)

BIT Office Pro PX-5 Jumperless 512K TX-chipset Motherboard Pentium 75-200Mhz/Cyrix® 686-200+/AMD K5/K6 DIMM+SIMM supported, 4 PCI+4 ISA slots, onbrd PCI-IDE, HISpd I/O, FD, Flash BIOS w/ OverClock Setting AT Form	$105
BIT Office Pro AX-5, same as above but in ATX Form	$115
SUS TX97 Pentium® processor-based board - 430TX PCISet, Pipelined 512K onbrd, 75-200Mhz Pentium/MMX/AMD/Cyrix200+ CPUs, 4 PCI+4 ISA+1 ASUS MediaBus slots, 168Pin DIMMx3 support, onbrd Ultra-IDE, FD, HISpd I/O, Flash Award BIOS w/NCR SCSI Suppt, AT form factor	$150
SUS TX97-E same as TX97, plus 72PinSIMMx4 support	$155
SUS TX97-X Pentium® processor-based board - 430TX PCISet, Pipelined 512K onbrd, 75-200Mhz Pentium/MMX/AMD/Cyrix200+ CPUs, 4 PCI+4 ISA slots, 168Pin DIMMx3 support, CreativeLabs VIBRA PnP Audio, onbrd Ultra-IDE, FD, HISpd I/O, USB, Flash Award BIOS w/NCR SCSI Suppt, ATX form factor	$187
SUS TX97-XE same as TX97X, plus 72PinSIMMx4 support	$189
SUS P2L97 Intel Pentium II motherboard - 233-333Mhz support, 440LX AGPset with Accelerated Graphics Port Connector for optimal Video Graphics, 5 PCI/2 ISA/1 AGP slots, DIMM, Onbrd I/O, UltraDMA PCI IDE, ATX format	$Call
SUS P2L97-S same as P2L97, plus onbrd Adaptec 7880 U-Wide SCSI	$Call
SUS P2L97-DS same as P2L97, plus onbrd Adaptec 7880 U-Wide SCSI and Dual Pentium II CPU support	$Call
el Anchorge AN430TX Pentium MMX motherboard - Yamaha OPL4 hardware wavetable audio, 512K Cache, 430TX chpst, 3 ISA+3 PCI slots, onbrd PCI-IDE, FD, I/O, PS/2 connectors, Flash AMI BIOS, 168Pin DIMM support upto 256MB, ATX form factor	$189
el Portland PD440FX Pentium II ATX Motherboard - Boxed version, 233-266MHz Supported, 440FX Chipset, 3 ISA+3 PCI Slots, 512K Cache on Pentium II CPU Cartridge, 4 72Pin SIMM Slots, Onboard Super I/O/FD/IDEs/ PnP Yamaha POL3 Integrated Audio	$250
el AL440LX Pentium II Motherboard - 233Mhz & above CPU support, 440LX AGPset with Accelerated Graphics Port Connector for optimal Video Graphics, Yamaha OPL4 hardware wavetable audio, 3 PCI/2 ISA/1 AGP slots, DIMM, Onbrd I/O, UltraDMA PCI IDE, ATX format	$Call
el DK440LX Dual Pentium II Motherboard 82440LX AGPset - 233Mhz & above Dual CPU support, 440LX AGPset w/ Accelerated Graphics Port Conntr for optimal Video Graphics, 4 DIMM slots, Onbrd I/O, UltraDMA PCI IDE, onbrd Intel Pro10/100BT Ethernet/Adaptec 7895 Dual Channel SCSI w/ RAIDport slot	$Call
ntel Providence PR440FX Dual Pentium® Pro processor-based board - Intel 440FX PCISet, support Dual Pentium® Pro CPUs w/VRM, ECC EDO buffered 168Pin DIMM upto 512MB, Integrated LAN Controller Intel 82557 (=EtherExpress® Pro/100B), Integrated UltraWide SCSI Adaptec® 7880 w/onbrd - External mini-68Pin Wide Connector, Integrated Audio - Crystal+Yamaha OPL3 FM Synthesizer 16bit StereoSound, 4 PCI+1 ISA slots, onbrd PCI Bus Master IDE ports, HiSpd I/O, FD, Dual ZIF Socket 8, Flash AMI PnP BIOS	$425
ILL P55XUW PCI Pentium® processor-based ATX board w/ Built-in Adaptec® PCI SCSI chipset 7880 (AHA-2940UW UltraWide SCSI), Intel 430TX chpst, MMX/Cyrix 686 CPU support, 50Pin Fast SCSI-2 & 68Pin Ultra Wide SCSI (40MB/s Burst) with optional RAID support, Pipelined 512K Cache onbrd, 3 PCI+4 ISA slots, 72Pin SIMM & 168PIN DIMM, onbrd UltraDMA IDE ports, FD, HISpd I/O, USB, 50+68Pin Wide SCSI + FD/HD/IO cables, Musical alarm CPU fan, PS/2 mouse port & EZ-SCSI V4.0L + Adaptec® software & manual included	$295
ILL DP6NS Dual Pentium® Pro processor-based board w/Built-in Adaptec® PCI SCSI chipset 7880 (AHA-2940UW UltraWide SCSI), 50Pin Fast SCSI-2 & 68Pin Ultra Wide SCSI (40MB/s Burst) with optional RAID support, Intel 440FX chpst, 150-233Mhz, 3 PCI+4 ISA slots, 72Pin SIMM support upto 512MB, onbrd PCI-IDE ports, FD, HISpd I/O, 50Pin SCSI + 68Pin Wide SCSI + FD/HD/IO cables, PS/2 mouse port & EZ-SCSI V4.0L+Adaptec® software driver & manual	$505
ILL PIINS Pentium II processor-based board - 233-300MHz Supported, 440FX Chipset, 4 ISA+4 PCI Slots, 512K Cache on Pentium II CPU Cartridge, 8 SIMM slots upto 1GB, Onboard Super I/O/FD/IDEs/USBs, Built-in Adaptec® PCI SCSI chipset 7880 (AHA-2940UW UltraWide SCSI), 50Pin Fast SCSI-2 & 68Pin Ultra Wide SCSI (40MB/s Burst) with optional RAID support, ATX, Award BIOS	$405
AN Tahoe-A ATX S1684SA Pentium II 233-300 MHz System Board - 4 PCI + 4 ISA slots, 6 72Pin SIMM for Max 512MB, Integrated Creative Labs Vibra 16 Audio, Onbrd Super IO/FD/IDEs/USBs/PS2, Flash Award BIOS (Also supports Pentium Pro CPU with optional Riser Card)	$245
AN Tahoe-2 ATX S1682D Dual Pentium II 233-300 MHz System Board - 5 PCI + 3 ISA Slots, 8 72Pin SIMM for Max 512MB, Onbrd Super IO/FD/IDEs/USBs/PS2, Flash Award BIOS (Also supports Pentium Pro CPU with optional Riser Card)	$320
an Tiger 2 ATX (S1692DL) - Pentium II board with Intel 440LX chipset	$Call for Detail
an Thunder 2 ATX (S1696DLUA) - Dual Pentium II board with Intel 440LX chpst	$Call for Detail
MI (American Megatrends, Inc) Goliath Quad Pentium® Pro Processor EISA/PCI motherboard - U.S. designed and made 180/200MHz (or higher) 1/2/4 processors supported, easy upgrade thru CPU based board approach, 1GB memory max onboard with 168 pin slots, 4 way Interleave for max performance, ECC support, 168Pin DIMM support, 82450GX chpst, AMI Flash BIOS, 6 PCI+4 EISA slots, integrated I/O w/ 1P/2S/FD/IDE, Full Size AT form factor	
Above w/ two 200MHz Pentium Pro 256K CPUs	$5220
Above w/ four 200MHz Pentium Pro 256K CPUs & 2nd CPU baseboard	$7835

CPU & Memory (Prices Subject to Change without notice)

el Pentium® Pro processor 256K/512K/1024K 150/180/200Mhz	$Call
el Pentium® II processor 233MHz/266MHz/300MHz 512K Cache	$Call
ntium® P5-100/120/133/150/166/200/233MHz/MMX CPU	$Call
MD® 486-100DX4/120DX4/5x86-133DX4/K5/K6	$Call
rix®/IBM® 6x86-166+/200+/M2 CPU	$Call
6/512K Synchronous Pipelined Cache COAST module	$20/$25
72Pin SIMM - 32/36Bit-FP/EDO/Parity	$Call
16/32/64MB 168Pin SDRAM DIMM Unbuffered 12ns for Triton VX/TX board	$Call
32/64/128MB 168Pin EDO DRAM DIMM w/ECC Buffered 60ns	$Call

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I/O Card/Controller Card

Adaptec 2940U Ultra SCSI-2/2940UW SCSI-2 Controller	$160/$205
Adaptec AAA-131/AAA-133 RAID 5 Ultra-Wide SCSI-2 Multi-Channel Host Adaptor w/1MB Cache onbrd	$460/$795
Western Digital PCI-SCSI Adapter - 7193RTL, Fast SCSI-2, 10MB/s, CorelSCSI!	$85
External SCSI-2 50Pin Mini-68Pin Adapter for internal 50pin ribbon cable SCSI	$20
External Wide SCSI Mini-68Pin Adapter with 3-68pin-connector internal ribbon cable for any onboard internal 68pin Wide SCSI interface	$45
Fast Wide SCSI-2 internal Ribbon Cable, 68Pin, 2/3 connectors	$20/30
External SCSI Cables/Terminator Centronic/Mini/UltraDensity 50/68Pin	$Call

Network Card

Ethernet NE2000 ISA PnP/Softset 16Bit Combo/PCI Combo	$25/$45
Intel EtherExpress Pro 10/100 PCI ENET 32Bit 10-BT (PILA8465B)	$65
3COM Etherlink III 3C509B Combo	$70
3COM Etherlink XL 3C900 Parallel-Tasking PCI Combo	$78
3COM Fast Etherlink XL 3C905-TX Parallel-Tasking 100BT PCI	$65

Video Card

Trident 9680 Windows Accelerator PCI 1MB/2MB with MPEG and AVI Motion Video built-in	$35/45
Diamond Stealth 3D 2000XL PCI 4MB EDO-DRAM	$80
Diamond Stealth 3D 3000XL PCI 2MB/4MB VRAM	$110/$150
ATI 3D ProTurbo.PC2TV SGRAM 4MB/8MB	$135/$180
ATI All-In-Wonder 7-in-One TV, Video and Graphic multimedia, PC or TV Display, TV Tuner, w/ ATI's 3D RAGE II and ImpactTV chipset 4MB	$265
Matrox MGA Millennium II WRAM PCI 4MB/8MB	$215/$365
Memory module for Millennium II 4MB/8MB/12MB	$145/$235/$325
Matrox MGA Mystique 220 2MB/4MB SGRAM OEM	$89/119
AGP (Accelerated Graphic Port) Type Video Card	$Call

Monitor

14" ShamRock 1Kx768NIx0.28DP Digital Control Pwr-Saving Monitor	$160
15"/17" ShamRock 1280x1KNIx0.28DP Monitor	$230/$445
Hitachi NSA SuperScan Pro CM-500U 15" .28DP, 1280x1024	$315
Hitachi NSA SuperScan Pro CM-620U 17" .28DP, 1280x1024	$525
Hitachi NSA SuperScan Pro CM-751MU 19" .22DP, 1600x1200	$1045
Hitachi NSA SuperScan Pro CM-800U 21" .22DP, 1600x1200x75Hz	$1355
Hitachi NSA SuperScan Elite CM-630U 17" .22DP, 1600x1280x69Hz	$695
Hitachi NSA SuperScan Elite CM-802U 21" .22DP, 1600x1280	$1790
Hitachi NSA SuperScan Elite CM-803U 21" .22DP, 1800x1440 77Hz	$1890
IIYAMA VisionMaster-17 MF-8617E 17" .26DP, Microprocessor Contrl, PnP, DPMS, MPRII, Full On-screen program, 1600x1200@69Hz	$540
IIYAMA VisionMaster-Pro 17 MT-9017E 17" .25DP, Microprocessor Contrl, PnP, DPMS, MPRII, Full On-screen program, 1600x1200@72Hz, Trinitron Tube	$620
IIYAMA VisionMaster MF-8221E 21" .22x.16DP, Microprocessor Contrl, PnP, DPMS, MPRII, Full On-screen program, 1600x1200@76Hz	$1255
IIYAMA VisionMaster MT-9021E 21" .30x.00DP, Microprocessor Contrl, PnP, DPMS, MPRII, Full On-screen program, 1600x1200@76Hz, Trinitron Tube	$1325
Sony 15" 100SX/100SF 17" 200SX/200SF/17SE2T	$339/$375/$595/$665/$850
Sony 20" 300SFT/GDM20SE2T	$1395/$1745
Viewsonic E641/E655/15GA/15GS/17EA/17GA/17PS/PT770/PT775/GT770/G800/G810/PT813/G810/GT800/29GA/P810/P815/etc	$Call
Mitsubishi, NEC, ADI, Nokia	$Call

Modem

SupraExpress 33.6K Voice Fax internal PnP	$65
SupraExpress 56K internal PnP Fax only / Fax + SpeakerPhone	$125/$145
USR Sportster 33.6K Faxmodem Internal/External	$95/$145
USR Sportster 33.6K Voice Faxmodem w/Voice Internal	$105
USR Sportster x2-56K Faxmodem Internal/External	$150/$195
USR Sportster x2-56K Voice Faxmodem w/Voice Int./Ext	$160/$215

Floppy Drive/Tape Backup

Floppy Drive 1.44M 3.5"/Teac 1.2M 5.25"/1.44M 3.5"	$24/$45/27
Colorado 3.2GB T-3000 off floppy Travan w/Win95 Sftwre, w/tape	$179
Colorado HP T4000S 8GB, 62MB/min, SCSI-2, Travan TR-4, internal, w/tape	$359
Seagate 4586NP SCSI-2 DAT DDS-2 Autoloader supports 4 - 120m 4MM DAT tapes for 32GB, optional 12 tape magazine for 96GB	$1235
Optional 12 tape magazine for above	$135
Iomega ZIP Drive 100MB w/disk ATAPI IDE -Internal	$120
Iomega ZIP Drive 100MB w/disk SCSI-Internal/External	$140/$155
Iomega ZIP Drive Disks single/three/ten pack	$15/$40/$130
Iomega Jaz Drive 1GB w/disk SCSI-Internal/External	$295/$400
Iomega Jaz Drive Disks single/five pack	$92/$445
Iomega Ditto TapeBackup 2GB Insider Tavan TR-1,2,3	$130
Iomega Ditto TapeBackup 3200 Insider 3.2GB Tavan QIC w/o tape	$165
Tape Cartridge TR-1/TR-3/TR-4/DAT	$32/$35/$45/$Call

KeyBoard/Mice/Software/Chassis/PowerSupply/Misc

Mitsumi/KeyTronic104 Enhanced Win95 Keyboard	$12/$21
Focus 2001 104 Win95 Key Enhanced Click w/Cover	$33
Focus 6002 104 Win95 Key Enhanced w/ wristrest	$30
Natural Keyboard SK-6000 Win95 Key Enhanced / with Touch Pad	$50/$70
MicroSoft Natural Keyboard Win95 Key/Ergonomic Serial/PS 2 type	$70/$30/$35
Logitech 2-Button Mouse Serial/PS2	$12/$12
Logitech Mouseman Serial+PS 2 Combo/Cordless	$30/$85
Logitech Trackman Marble	$80
MS DOS 6.22/Windows V3.11/WFWG V3.11(w/System Purchase)	$45/55/75
MS Windows 95 Full CD OEM/NT V4.0 Workstation (w/SystemPurchase)	$90/$145
MS Office Professional 97 CD version	$325
MS Windows NT V4.0 Server with 5 User Access License OEM	$560
MS Windows NT V4.0 Server 20 User Access License (No Software)	$580
GigiStar Series Full Tower AT 250W/ATX 230W	$110/$115
GigiStar Series Medium Tower AT 250W/ATX 230W	$85/$90
GigiStar Series Mini Tower/DeskTop AT 230W	$50/$55
Server Class Super Case w/250W PS w/ detachable front panel, Dual side door, solid construction, slide-in Drive Bay, Dual fans, lots of bays, Fits Full/Baby AT Size board, Medium/Full Tower	$115/$140
Server Chassis (T-101)/Disk Array Chassis (T-103): Dimension=13"x31"x22" w/Dual Redundancy & Hot Swappable Power Supplies:	
- T-101:12 DriveBays/Upto 2 PowerSupply 2x300W, 2x4.6" Smart Fans w/ Efficient, Air Flow, Full Size AT Motherboard FormFactor	$880
- T-103: 16 DriveBays/Upto 2 PowerSupply 2x300W, 2x4.6" Smart Fans w/ Efficient Air Flow, Perfect RAID Disk-Array Sub-Chassis	$880
Server Chassis LT-18 By Axxion w/o Power Supply - Full-size AT, Baby AT, oversize AT based boards, 11 drive bays (one 3.5" and four 5.25" exposed, six 5.25" hidden bays), Twelve slots, "snap-in" drive rails, second cooling fans, accepts standard power supply, Dims: 26" x 10" x 24.5"	$480
Server Enclosure KS-1400 w/ Dual Redundant Hot-Swappable 300Wx2 PS, Full-size AT, Baby AT, oversize AT based boards, 14-5.25" drive bays, Twelve slots, "snap-in" drive rails, 8 cooling fans, Dims: 20.5" x 16.25" x 23.75" (DxWxH)	$990
Deluxe External SCSI Case w/Terminator+SCSI Cable+P/S+Fan 3.5" Half Height/5.25" Half Height	$60/$90
Deluxe External SCSI Case w/68Pin Wide/Ultra Wide SCSI Connector + P/S + Fan 3.5" Half Height with 68Pin External Cable and Terminator	$150
Power Supply PS-2 Type 230W/250W/300W	$28/$35/$85
Power Supply ATX Type 235W/300W	$55/$85
486/P5/P6 CPU Cooling Ball-Bearing Fan w/heat sink	$8/$12/$25
Chassis Second Cooling Fan 3" or 3.5"	$15
Printer Cable 6"/10"/15"/25"	$5/7/10/16
PS/2 mouse port connector for motherboard PS/2 mouse port	$10

CD-ROM Drive

Toshiba XM-6102B 24X Speed Internal ATAPI IDE CD ROM	$95
Panasonic CR585 24X Speed Internal ATAPI IDE CD-ROM	$95
NEC 16X Speed Internal ATAPI IDE CD ROM	$75
Mitsumi FX1600 16X Speed Internal ATAPI IDE CD-ROM	$85
Mitsumi FX800 8X Speed Internal ATAPI IDE CD-ROM	$65
Toshiba XM-5701 12X Speed Internal SCSI CD ROM	$115
Toshiba XM-3801B 15X Speed Internal SCSI CD ROM	$145
Plextor 20-Plex 12/20XSpeed, 1800-3000Kb/sec, Fast SCSI2, 95ms seek, 512K Buffer, SCAM, w/Tray, PX-20TSI internal	$240
Philips CDD2600 SCSI-2 CD-ROM Writer 1MB Cache, 2X record & up to 6X read, w/SCSI Controller, Corel CD Creator, 2 blank CDs Internal/External	$490/$595
Yamaha CD-ROM Writer CDR400TIPC/CDR401TIPC 512KB Cache, up to 4X record & 6X read, Internal bare version w/Software SCSI2/IDE	$750/$760
Ricoh CD-ReWritable and Recordable Drive SCSI-2 2xWrite/6xRead, Internal, w/ Adaptec Controller, Direct CD UDF packet writing software + Seagate Backup Exec and Easy CD Pro Suite for 95	$595

Sound Card/Speaker/MultiMedia Package

Yamaha, Altec, Lansing Speakers	$Call
60W/80W/120W Hi-Fi Amplified Stereo Speakers	$15/30/55
Sound Blaster Compatible 16Bit ESS Stereo w/PnP, IDE port	$30
Sound Blaster 16 Vibra PnP OEM	$65
Sound Blaster AWE64 PnP Value OEM	$125
Sound Blaster AWE64 GOLD PnP w/ IDE interface Retail	$180
Digital Video Conference Kit - 24bit color camera, PCL Capture Card, 100% IVision Compatible. Complete Software + driver for Win95	$225
Audio Cable - CD-ROM to Sound Card	[illegible]

HardDisk

Western Digital - Caviar

1.2GB IDE WDAC11200 - Enhanced IDE Mode-4 256KB 11ms 5200RPM	$159
2.0GB IDE WDAC22000 - Enhanced IDE Mode-4 256KB 11ms 5200RPM	$185
2.5GB IDE WDAC22500 - Enhanced IDE Mode-4 256KB 11ms 5200RPM	$205
3.1GB IDE WDAC33100 - Enhanced IDE Mode-4 128KB <12ms 5200RPM	$215
4.3GB IDE WDAC34300 - UltraDMA 33.3Mb/s 256KB 11ms 5400RPM	$275
5.1GB IDE WDAC35100 - UltraDMA 33.3Mb/s 256KB 11ms 5400RPM	$Call
6.4GB IDE WDAC36400 - UltraDMA 33.3Mb/s 256KB 9.5ms 5400RPM	$Call
2.1GB Ultra SCSI-2 Enterprise E2170-3 512KB 7200RPM	$470
2.1GB UltraWide SCSI-2 Enterprise E2170-7 512KB 7200RPM	$475
4.3GB Ultra SCSI-2 Enterprise E4360-3 512KB 7200RPM	$650
4.3GB UltraWide SCSI-2 Enterprise E4360-7 512KB 7200RPM	$655

Quantum

2.1GB FireBall ST32160A EIDE UltraDMA 10ms, 5400RPM	$185
3.2GB FireBall ST33240A EIDE UltraDMA 10ms, 5400RPM	$225
4.3GB FireBall ST34320A EIDE UltraDMA 10ms, 5400RPM	$270
6.5GB FireBall ST36480A EIDE UltraDMA 10ms, 5400RPM	$365
2.1GB FireBall ST32160S Ultra-SCSI 10ms, 5400RPM	$230
3.2GB FireBall ST33240S Ultra-SCSI 10ms, 5400RPM	$315
4.3GB FireBall ST34320S Ultra-SCSI 10ms, 5400RPM	$375
6.5GB FireBall ST36480S Ultra-SCSI 10ms, 5400RPM	$505
4.5GB Viking VK34550N Ultra SCSI-2, 8ms, 7200RPM	$720
4.5GB Viking VK34550W Ultra Wide SCSI-2, 8ms, 7200RPM	$730
9.1GB Atlas AL39100N Ultra SCSI-2, 8ms, 7200RPM	$1195
9•.1GB Atlas AL39100W Ultra Wide SCSI-2, 8ms, 7200RPM	$1205

Seagate

2.26GB Barracuda 4LP ST322•72N Ultra SCSI-2 50pin 7200RPM, 512K	$510
2.26GB Barracuda 4LP ST32272W Ultra Wide SCSI-2 68pin 7200RPM, 512K	$525
4.55GB Barracuda 4LP ST34572N Ultra SCSI-2 50pin 7200RPM, 512K	$740
4.55GB Barracuda 4LP ST34572W Ultra Wide SCSI-2 68pin 7200RPM, 512K	$755
9.1GB Barracuda9 ST19171N Ultra SCSI-2 50pin 7200RPM, 512K	$1250
9.1GB Barracuda9 ST19171W Ultra Wide SCSI 68pin 7200RPM, 512K	$1265
4.55GB Cheetah AV ST34501N Ultra SCSI-2 8.5MS, 10000RPM	$830
4.55GB Cheetah AV ST34501W UltraWide SCSI 68pin 7.5MS, 10000RPM	[illegible]
9.1GB Cheetah AV ST19101N Ultra SCSI-2 7.5MS, 10000RPM	$1515
9.1GB Cheetah AV ST19101W UltraWide SCSI 7.5MS, 10000RPM	$1525

MicroPolis

4.5GB TomaHawk 4LP 4345NS Ultra SCSI-2 50pin 7200RPM, 8ms, 512K	$595
4.5GB TomaHawk 4LP 4345WS UltraWide SCSI-2 68pin, 7200RPM, 8ms, 512K	$615
9.1GB TomaHawk9 3391NS Ultra SCSI-2 50pin, 7200RPM, 8ms, 512K	$995
9.1GB TomaHawk9 3391WS Ultra Wide SCSI-2 68pin, 7200RPM, 8ms, 512K	$1030

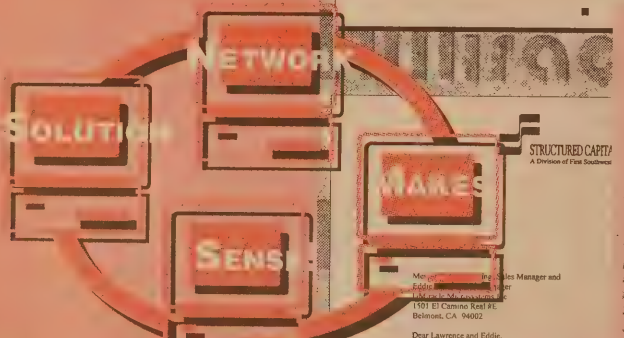
PC UPGRADES & SERVICE WELCOME! OUR TECHNICAL EXPERTS CAN TROUBLESHOOT YOUR PROBLEMS SUPER FAST!

NETWORK DESIGN LAYOUT
PHYSICAL CABLING SERVICE
SERVER/CLIENT SETUP/CUSTOMIZATION
WAN/LAN CONNECTIVITY
INTERNET/EMAIL CONNECTION
EQUIPMENT SETUP/CUSTOMIZATION
SOFTWARE DESIGN/INSTALLATION
POWER AND DATA PROTECTION
USER/ADMINISTRATOR TRAINING
EXPERTISE TECHNICAL SUPPORT
MAINTAINENCE CONTRACT

MIS GUYS, WE KNOW YOU ARE TIRED! YOUR COMPANY DEPENDS ON YOUR NETWORK AND YOUR NETWORK DEPENDS ON YOU! YOU ARE PAYING YOUR CONSULTANT TO EXPERIMENT WITH YOUR HARDWARE! YOUR HARDWARE PROVIDER IS CLAIMING YOUR PROBLEM IS SOFTWARE RELATED BUT YOUR SOFTWARE VENDOR SAYS IT IS NOT! AND YOUR BOSS IS PULLING YOUR HAIR!

YOU THOUGHT IT WAS EASY? WISH YOU HAVE KNOWN THE COMPATIBILITY PROBLEM FOR YOUR NON-RETURNABLE PURCHASE? WISH YOUR CONSULTANT HAVE KNOWN IT ALL?

DON'T YOU KNOW CONSULTANTS COME TO UMIRACLE WHEN THEY NEED HELP? DON'T YOU KNOW YOU CAN SAVE MONEY BY SKIPPING YOUR VAR? DON'T YOU KNOW YOU CAN SIT BACK AND RELAX IF UMIRACLE PROVIDES YOU A COMPLETE, HASSLE-FREE VERTICAL SOLUTION?



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* EQUIPMENT BUSINESS LEASE APPLIES TO EQUIPMENT, CABLING & SETUP LABOR ALTOGETHER. LEASE PAYMENT IS BASED ON $1 PURCHASE PURCHASE OPTION. ONE TIME $75 DOCUMENTATION FEE ARE REQUIRED. TWO ADVANCED PAYMENTS REQUIRED IF APPROVED. TAXES ARE NOT YET INCLUDED.

5 + PEER2PEER NETWORK SOLUTION

- FIVE ASUS TX97 AMD-K5 166MHz WorkStations w/Licensed Windows 95
  (See Previous Pages for Workstation Configuration Details)
- FIVE Intel EtherExpress 100BaseT PCI Network Interface Adapters Installed
- Up to 500' Catalog-5 100BaseT UTP Cabling (InWall w/ Plates - 5 Nodes)
- 10BaseT 8-Port Hub
- HP LaserJet 5 Printer
- OnSite Windows 95 Peer to Peer Network Resources and Printer Setup

Recommended Options:
- 100BaseT 8-Port Hub
- Internet Access + EMail Solution
- Network User + Administrator Training
- 3 Month 8-Hour Response Service Maintainence Contract

$7019 or **EQUIPMENT BUSINESSLEASE*** FOR AS LOW AS **$195.13** PER MONTH 48 MONTHS

10 + ONE NETWORK SOLUTION

- TEN ASUS TX97 AMD-K5 166MHz WorkStations w/Licensed Windows 95
- ONE ASUS P2L97 Pentium II 266MHz AGP File Server w/25 User Licensed NT4.0 Server
  (See Previous Pages for Workstations and Server Configuration Details)
- ELEVEN Intel EtherExpress 100BaseT PCI Network Interface Adapters Installed
- HP LaserJet 5N WorkGroup Printer w/10BaseT Connection to Server
- 3COM 3C250B-TX 12-Port 100BaseT Stackable Hub
- APC Smart-UPS VS420 Un-interruptable Power Supply w/ Setup
- Up to 1100' Catalog5 100BaseT UTP Cabling (InWall w/ Plates - 11 Nodes)
- OnSite Windows NT WorkGroup Network Resources and Printer Setup

Recommended Options:
- Internet Acces + EMail Solution
- 3 KeyStroke Recovery Backup Solution
- Fax Server Solution
- Network User + Administrator Training
- 6 Month 8-Hour Response Service Maintainence Contract

$17521 or **EQUIPMENT BUSINESSLEASE*** FOR AS LOW AS **$487.08** PER MONTH 48 MONTHS

20 + ONE NETWORK SOLUTION

- TWENTY Intel Anchorage w/Audio Pentium 166MMX WorkStations w/Licensed Windows 95
- ONE Intel Providence PentiumPro File Server w/ One PentiumPro 180MHz CPU
  w/25 User Licensed NT4.0 Server
  with Dual 100BaseT PCI NICs each connected to 100BaseT hub for double thoroughput
  (See Previous Pages for Workstations and Server Configuration Details)
- TWENTY-TWO Intel EtherExpress 100BaseT PCL Network Interface Adapters Installed
- ONE HP LaserJet 5M WorkGroup Printer w/10BaseT Connection to Server
- TWO 3COM 3C250B-TX 12-Port 100BaseT Stackable Hub
- APC Smart-UPS VS650 Un-interruptable Power Supply w/ Setup
- Up to 2100' Cat5 100BaseT UTP Cabling (InWall w/ Plates - 21 Nodes)
- OnSite Windows NT WorkGroup Network Printer and Resources Setup

Recommended Options:
- Internet Acces + EMail Solution
- 3 KeyStroke Recovery Backup Solution
- Fax Server Solution
- Network User + Administrator Training
- 6 Month 8-Hour Response Service Maintainence Contract

$40499 or **EQUIPMENT BUSINESSLEASE*** FOR AS LOW AS **$1121.02** PER MONTH 48 MONTHS

40 + ONE NETWORK SOLUTION

- FORTY Intel Anchorage w/Audio Pentium 166MMX WorkStations w/Licensed Windows 95
- One RAID-5 Dual PentiumPro 200MHz-256K File Server w/45 User Licensed NT4.0 Server
  with Adaptec ANA-6940 Quad 100BaseT Port PCI Adapter for quadruple thoroughput
  (See Previous Pages for Workstations and Server Configuration Details)
- FORTY Intel EtherExpress 100BaseT PCI Network Interface Adapters Installed
- ONE HP LaserJet 5SiMX Departmental Printer w/10BaseT Connection to Server
- FOUR 3COM 3C250 12-Port 100BaseT Stackable Hubs
- APC Smart-UPS VS1000 Un-interruptable Power Supply w/ Setup
- Up to 4100' Catalog5 100BaseT UTP Cabling
  (InWall w/ Plates - 41 Nodes plus Wiring Rack)
- OnSite Windows NT WorkGroup Network Printer & Resources Setup

Recommended Options:
- Internet Acces + EMail Solution
- 3 KeyStroke Recovery Backup Solution
- Fax Server Solution
- Network User + Administrator Training
- 12 Month 8-Hour Response Service Maintainence Contract

$100004 or **EQUIPMENT BUSINESSLEASE*** FOR AS LOW AS **$2720.11** PER MONTH 48 MONTHS

INTERNET ACCESS+EMAIL SOLUTION

INTERNET PROVIDES POWER TO BUSINESS USERS LIKE YOU! EXPLORING YOUR IDEA, GO TO INTERNET! RESEARCHING YOUR PROJECT, GO TO INTERNET! MAKING AN INTERNATIONAL CALL, GO TO INTERNET! ONCE YOU HAVE IT, YOU WILL HOOK ON IT. AND TO HOOK ON IT CHEAP, YOU NEED ISDN INTERNET ACCESS FROM UMIRACLE. WE WILL SETUP YOUR ISDN LINE, GET YOU THE RIGHT ROUTER, SETUP YOUR ISP ACCESS ACCOUNT, SETUP YOUR EMAIL ADDRESSES, CONFIGURE YOUR NETWORK WITH TCPIP PROCOTOL, ALL FOR ONE PACKAGE PRICE! CALL UMIRACLE NETWORK SOLUTION FOR DETAILS!

3-KEYSTROKE RECOVERY BACKUP SOLUTION

YOU THINK YOU GOT IT ALL BACKED UP? NOT UNTIL THE DAY YOUR SERVER CRASHES YOU WILL FIND OUT YOU HAVE TO 1.) TROUBLESHOOT AND REPLACE YOUR DEFECTIVE COMPONENTS, 2.) RELOAD YOUR NOS, DRIVERS, APPICATIONS AND BACKUP SOFTWARE, 3.)RESTORE YOUR DATA FILES FROM BACKUP, 4.)RECONSTRUCT YOUR USER AND PRINTER ACCOUNTS, AND 5.)EXPECT MISSING AND CORRUPTED DATA HERE AND THERE! WHY? BECAUSE YOUR BACKUP SOFTWARE BACKS UP ONLY DATA FILES, NOT THE OPENED FILES, NOT THE SECURITY DATABASE OR PARTITION INFORMATION! BACKUP SOFTWARE DON'T MAKE SENSE UNTIL NOW! WITH REPLICA V3 BY STAC, YOU CAN BACKUP YOUR HARDDRIVE PARTITIONS AS OBJECTS, RESCUE YOUR DISASTER WITH 3 KEYSTROKES FROM A RECOVERY DISK, EVEN FROM A LOW-LEVEL-FORMATED HARDDRIVE, AND BRING YOUR SERVER UP IN HOURS! TO FIND OUT HOW WE CAN PROVIDE THIS SOLUTION, CALL US NOW!

FAX SERVER SOLUTION

DON'T WAIT IN LINE FOR YOUR TURN TO FAX, DON'T HAND-WRITE YOUR COVER PAGE! FAX DIRECTLY FROM YOUR DESKTOP, NEATLY AND PROFESSIONALLY! WITH THE RIGHT FAX SOLUTION, YOU CAN RECEIVE YOUR FAX AND PRINT RIGHT TO YOUR LASER PRINTER, REPRINT YOUR 6 MONTHS OLD FAX, FAX YOUR DOCUMENTS FROM YOUR WINDOWS APPLICATION JUST LIKE PRINTING. ALL VIA ONE LINE, ONE MODEM! FORGET ABOUT BRINGNG A LINE AND A MODEM TO EVERY DESKTOP! WITH WINFAX PRO FOR NETWORKS (NON-DELICATED) AND SATISFAXTION FAXBOARD, AND UMIRACLE NETWORK SOLUTION TECHNICAL EXPERTISE, WE SURE CAN GET YOU THE BEST SOLUTION! CALL US FOR DETAILS!

WE MONITOR THE TRENDS OF EVERY TECHNOLOGY IN THE INDUSTRY AND GET YOU THE BEST! GUARANTEE WE WILL TAKE IT BACK IF IT DOESN'T WORK!

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pricing.

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To whom it may concern.

have been delighted to have UMiracle as
hardware for our 7 server, 100+ user wide a
and extremely courteous. In a
salespeople and knowledgeable and (most im
extremely competitive.

During the past year our organization has grow
approximately 75 PCS with several laptops an
supplied virtually all of our hardware. In the h
of data is of the utmost importance and the ha
reliability. In a few rare instances when there
configuration, hardware was politely and pron
available.

UMiracle succeeds in all three of the most imp
excellent support and competitive pricing, and

Sincerely,

Network Administrator

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A Division of First Southwest

Me[redacted]ing Sales Manager and
Eddie [redacted]ger
UMiracle Microsystems Inc
1501 El Camino Real #E
Belmont, CA 94002

Dear Lawrence and Eddie,

I would like to let you know how pleased we have been w
systems, the speed with which you turn around machines, and your wonderful service and repair operation
have allowed my firm t

My firm is an i
reliability of ou
low prices as we

Thanks again fo
your boss of the

Sincerely,

Gregory J. Reite
Vice President

Industry Insights *continued from page 26*

TECH STOCKS DOWN, BUT CONTINUE TO OUTSHINE THE DOW

EXCH	COMPANY	TICKER SYMBOL	CLOSING PRICE 07/31/97	CLOSING PRICE 08/28/97	NET CHANGE IN PERIOD	PERCENT CHANGE IN PERIOD	P/E RATIO	ANNUAL IVIDEN RATE	ANNUAL DIVIDEND YIELD	ANNUAL HIGH	ANNUAL LOW
	SOFTWARE										
NAS	Adobe	ADBE	37.38	39.94	2.56	6.86	16	0.20	0.50	49.00	31.50
NAS	Autodesk (H)	ADSK	42.38	43.75	1.38	3.24	-	0.24	0.55	47.00	21.00
NAS	Borland (H)	BORL	8.25	8.63	0.38	4.55	-	0.00	0.00	9.81	4.75
NAS	Broderbund	BROD*	21.69	28.88	7.19	33.14	-	0.00	0.00	35.75	17.75
NAS	Informix	IFMX	11.31	9.00	-2.31	-20.44	-	0.00	0.00	31.13	6.56
NAS	Macromedia	MACR	9.56	9.63	0.06	0.65	-	0.00	0.00	25.63	6.50
NAS	Microsoft	MSFT	141.50	132.06	-9.44	-6.67	50	0.00	0.00	150.75	60.38
NAS	Novell	NOVL	7.56	9.63	2.06	27.27	120	0.00	0.00	13.00	6.28
NAS	Oracle (H)	ORCL	36.29	36.31	0.02	0.06	45	0.00	0.00	42.13	22.50
NAS	Symantec (H)	SYMC	24.06	23.75	-0.31	-1.30	33	0.00	0.00	25.63	8.75
	HARDWARE										
NAS	Apple (H)	AAPL	17.50	22.00	4.50	25.71	-	0.00	0.00	29.56	12.75
NYS	Compaq (H)	CPQ	57.13	64.00	6.88	12.04	32	0.00	0.00	68.75	20.50
NYS	Digital Equipment (H)	DEC	41.13	42.50	1.38	3.34	63	0.00	0.00	47.81	25.00
NAS	Dell (H)	DELL	85.50	81.63	-3.88	-4.53	40	0.00	0.00	87.94	15.75
NYS	Gateway 2000	GTW	38.13	39.06	0.94	2.46	22	0.00	0.00	46.25	19.38
NYS	Hewlett-Packard (H)	HWP	70.00	61.06	-8.94	-12.77	22	0.56	0.92	71.50	42.50
NYS	IBM (H)	IBM	105 75	101.13	-4.63	-4.37	17	0.80	0.79	109.44	55.63
NYS	Silicon Graphics (H)	SGI	25.13	27.88	2.75	10.95	65	0.00	0.00	28.81	12.63
NAS	Sun Microsystems (H)	SUNW	45.69	48.06	2.38	5.20	25	0.00	0.00	53.31	25.50
NYS	Tandy (H)	TAN	59.44	66.38	6.94	11.67	-	0.80	1.21	67.81	37.13
NYS	Xerox (H)	XRX	82 25	75.94	-6.31	-7.67	20	1.28	1.69	84.50	44.63
	CPU'S										
NYS	Advanced Micro Devices	AMD	35.13	38.50	3.38	9.61	-	0.00	0.00	48.50	12.13
NYS	Cypress Semiconductor (H)	CY	15.31	17.63	2.31	15.10	126	0.00	0.00	17.88	10.00
NAS	Cyrix	CYRX	25.44	28.25	2.81	11.06	-	0.00	0.00	30.00	11.50
NAS	Intel (H)	INTC	91.81	92.38	0.56	0.61	24	0.12	0.13	102.00	39.25
NYS	LSI Logic	LSI	31.50	31.31	-0.19	-0.60	30	0.00	0.00	46.88	20.13
NYS	Motorola	MOT	80.38	74.63	-5.75	-7.15	44	0.48	0.64	90.50	44.13
	COMMUNICATIONS										
NAS	3Com	COMS	54.69	47.31	-7.38	-13.49	-	0.00	0.00	81.38	24.00
NYS	AT&T	T	36.81	39.56	2.75	7.47	12	1.32	3.34	42.63	30.75
NYS	BellSouth Corp. (H)	BLS	47.38	44.75	-2.63	-5.54	17	1.44	3.22	48.81	35.25
NAS	Cisco (H)	CSCO	79.50	75.00	-4.50	-5.66	49	0.00	0.00	83.25	45.25
NAS	MCI	MCIC	35 31	28.44	-6.88	-19.47	17	0.05	0.18	43.38	23.88
NYS	Northern Telecom	NT	104.56	99.88	-4.69	-4.48	37	0.60	0.60	107 19	48.50
	INTERNET										
NAS	Earth Link	ELNK	10.75	13.50	2.75	25.58	-	0.00	0.00	22.50	8.63
NAS	Netcom	NETC	15.44	13.38	-2.06	-13.36	-	0.00	0.00	22.50	7.88
NAS	Netscape	NSCP	36.69	38.63	1.94	5.28	-	0.00	0.00	65.00	23.50
NAS	Yahoo (H)	YHOO	56.50	56.13	-0.38	-0.66	-	0.00	0.00	57.75	16.75
	MEDIA										
NYS	Disney	DIS	80.81	77.75	-3.06	-3.79	28	0.53	0.68	85.13	55.63
NAS	TCI (H)	TCOMA	17.13	17.50	0.38	2.19	-	0.00	0.00	19.44	10.75

KEY: NYS = NEW YORK ASE = AMERICAN NAS = NASDAQ

MARKET DIARY:

ADVANCES	22
DECLINES	17
UNCHANGED	0
NEW HIGHS	20
NEW LOWS	0

MOST ACTIVE ISSUES:

LARGEST DOLLAR GAINER	Broderbund	$	7.19
LARGEST DOLLAR LOSER	Microsoft	$	-9.44
LARGEST PERCENTAGE GAINER	Broderbund	33.14	%
LARGEST PERCENTAGE LOSER	Informix	-20.44	%

	CLOSE 07/31/97	CLOSE 08/28/97	NET CHANGE IN PERIOD	PERCENT CHANGE IN PERIOD
MICROTIMES STOCK INDEX	11003.29	10650.13	-353.15	-3.21
DOW JONES INDUSTRIAL AVERAGE	8222.61	7694.43	-528.18	-6.42
STANDARD & POOR'S 500 INDEX	954.29	903.67	-50.62	-5.30
N.Y S.E. COMPOSITE	494.50	472.36	-22.14	-4.48
NASDAQ COMPOSITE	1593.81	1581.32	-12.49	-0.78

CLOSING QUOTES FOR GRAPH:

DATE	MICRO TIMES	DOW JONES
02/13/97	8809.79	7022.44
03/13/97	8310.08	6878.89
04/10/97	8083.85	6540.05
05/08/97	9110.24	7136.62
06/05/97	9223.00	7305.29
07/03/97	9842.13	7895.81
07/31/97	11003.29	8222.61
08/28/97	10650.13	7694.43

Source: Nordby International Inc. (*nordby.com*), Boulder, CO.
This information is based on sources believed to be reliable, and while extensive efforts are made to assure its accuracy; no guarantees can be made. Nordby International assumes no liability for any inaccuracies. For information on Nordby's customized financial research services, call (303)938-1877.

The MicroTimes Stock Index dropped 353.15 points, down to 10,650.13 for August, but continued to perform better than the Dow Jones Industrial Average. Specifically, the MicroTimes Index posted a 3.21% decline for the month, compared to the Dow's 6.42% slide. In all, the technology sector continued to outperform the broader indexes as the technology-laden Nasdaq Index lost just 12.49 points for the month; a mere 0.78% drop.

Hardware stocks again dominated the winners in the MicroTimes Stock Index with a near-perfect ten of our eleven hardware issues reaching new 52-week highs during the period. Among these, much of the news centered around Apple Computer and its continued restructuring plans. Early in the month, the company saddened some employees, but elated investors with the announcement that Apple and arch-rival Microsoft were laying the past to rest and forging ahead with a series of new alliances. The companies reported they have entered into a product and technology development accord which calls for a $150,000,000 investment by Microsoft in non-voting Apple stock. Apple stock zoomed upwards on the news and ended the month up 25.71% to close at $22.00.

Software giant Microsoft shed $9.44 for the month, falling back 6.67% to $132.06. Speculation of a potential merger with IBM created heavy volume for Provo, UT network software firm Novell. Novell Chairman Eric Schmidt stated the struggling outfit is not for sale, and refused to comment further. Executives at IBM remained silent regarding the rumor, also stating it was against the company's policy. Regardless, investors spoke up loudly by snapping up shares. Novell closed out the month up an impressive 27.27% to $9.63.

MCI continued its losing ways this month as the company bled 6.88 points, or 19.47%, on it's way down to $28.44. The company had negotiated an agreement with British Telecom to merge and create Concert Plc, one of the world's largest telecommuications companies, last November for a price tag of $21 billion, but was forced to reduce the terms to about $17 billion after MCI's July announcement that losses from local markets would mount to $800 million—more than double the amount originally projected. ■

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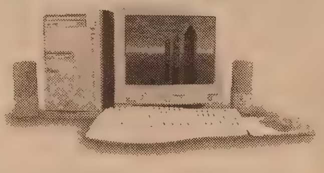

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- HP 1536 4.0GB SCSI Int Tape Drive
- PCI SVGA Card w/1MB DRAM
- 12X SCSI CD ROM Drive
- Victoria 3-Button Serial Mouse & Pad
- 104-Key Keyboard
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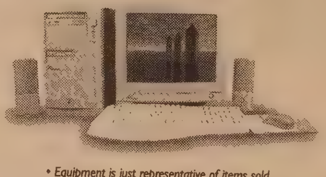

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- Western Digital 4.0GB EIDE HDD
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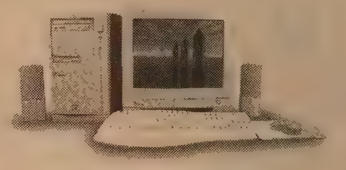

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- Western Digital 3.1GB EIDE HDD
- Matrox Mystique w/4MB SGRAM
- US Robotics Sportster X2 56K Voice/Fax/Modem
- Panasonic 24X EIDE CD ROM
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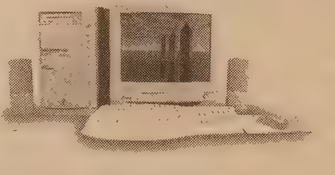

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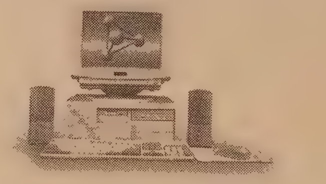

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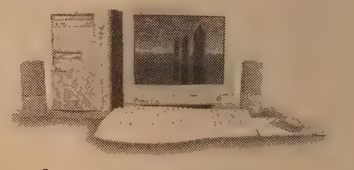

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Victoria™ RED

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- 1.44MB Floppy Disk Drive
- Western Digital 2.1GB EIDE Hard Disk
- Matrox Mystique w/2MB SGRAM
- US Robotics Sportster 56K X2 Voice/Fax/Modem
- Toshiba 16X EIDE CD ROM
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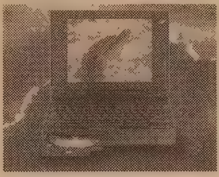

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REALIZABLE FANTASIES • BY JIM WARREN

On The Road

Thoughts While Traveling—Plus A Powerful Fantasy

Since I'm roaming in a wallowing Winnebago (or Whine-abago, if we go for truth in labeling)—properly equipped, of course, with its dual 20" color monitors and PowerMac with a minimal 6GB of storage—I'll begin with the fun stuff, and then get to a much-needed real[izable] fantasy.

Observations while driving:

Selective Power Failure

A large dot-matrix sign for a Citgo gas station in Deming, NM, brightly blinked that Regular was $1.139/gallon. When I arrived, eager to "rip off the oil cartel" (yeah, uh huh), I found it was $1.199. Asking about the difference, I got their quick, rote answer—apparently stated often—that power outages and lightning sometimes knock out some of the lights in the sign's display matrix.

Interesting how only *very* selective lights happened to burn out (draw a "3" and a "9" in a 7 x 9 dot-matrix display and you'll see what I mean).

Cellphone "Roaming"—A Fantasy And Farce!

Don't you believe it when some cellphone huckster tells you that you can use your cellphone nationally (if, of course, you can afford it). Thanks to the arrogance of cellphone designers, plus the government-granted monopoly of only one or two cell services per service area, you're at least screwed on price, and often can't even get the opportunity to pay through the nose!

When the cellular system was first being designed, one of the design contractors at SRI International—who was a specialist in telephone fraud—pointed out that the proposed design was *ripe* for easy cloning and massive fraud, and urged and pleaded that they include additional circuitry to implement easy, well-understood ID encryption and authentication. Instead of the small additional expense of such circuits, the prenatal but powerful cell industry simply went to Congress and had them make cellphone fraud illegal. And now, we have multi-billion-dollar cell fraud annually.

For provider self-protection against the potential fraud that the cell industry so readily facilitated, as soon as you roam outside of your own cell company's service area, the carrier that picks up your request to place a call (if any such carrier exists, at all, in that area, that has an agreement with your cell company), they can still decide whether or not to accept your call.

In Austin, TX, AT&T Wireless refused; their automated message asked me to contact 611 (the standard "trouble" number for cellphone users). After a 25-minute wait, AT&T answered—and said that my cell company, Cellular One in the San Francisco Bay Area, would have to fix the problem. After another 20 minutes, Cell One answered—and said they didn't see any problem, but only their subcontractor through whom I got Cell One service could fix it. After a mere 15-minute wait, the subcontractor said they would have Cell One fix the problem within five minutes. It was not until the following morning—as I was leaving Austin—that I could finally use my useless cellphone.

> Thanks to the cell industry's myopic design, plus the fact that they're the only game in town (for wireless "consumer" phone service), and their arrogance in the way they "protect" themselves against potential fraud, your cellphone will often be worthless, if you roam!

In West Palm Beach, FL, it's even worse. There (here, because that's where I am as I write this rant), one AT&T Wireless message says to call 611, and 611—the supposed trouble number—won't even answer; it automatically says the phone is not authorized for use at this time.

After an hour and a quarter on one day, and 50 minutes on a second day—using land-lines of course; the cellphone is useless—a total of five different Cell One and subcontractor operators and supervisors have each told me "fixes" that didn't work, and then assured that they would stay on it and fix it quickly. Two days later, it still doesn't.

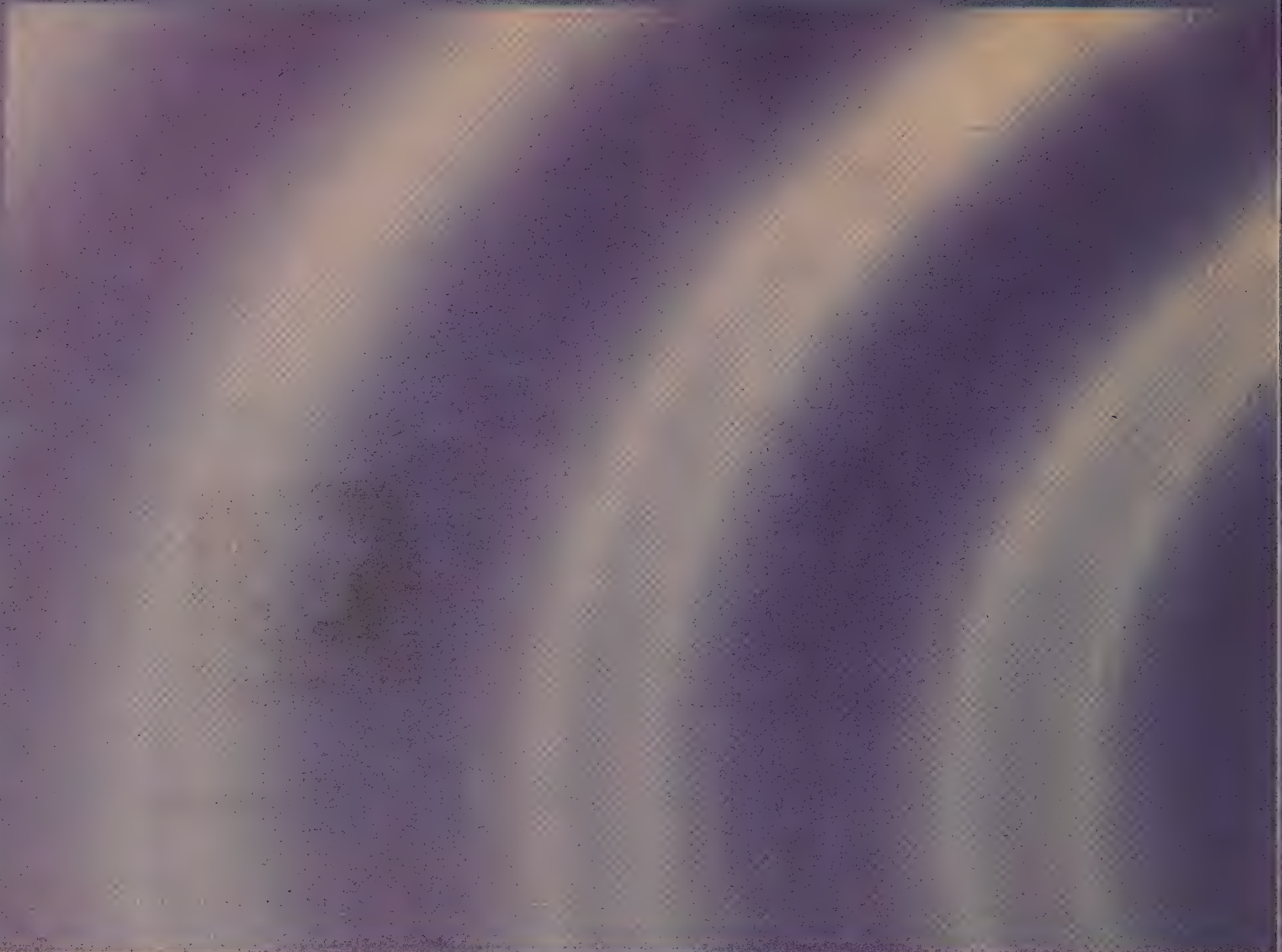
Thanks to the cell industry's myopic design, plus the fact that they're the only game in town (for wireless "consumer" phone service), and their arrogance in the way they "protect" themselves against potential fraud, your cellphone will often be worthless, if you roam!

Email Surveillance Is *Nothing!*

If you think some of the government's surveillance and searches of computers and email are "disturbing," you ain't seen nothin'! Just try driving along I-10 through Texas or New Mexico (perhaps 100 miles *inside* of US borders).

Under the brain-cooking sun, in the middle of the desert, all lanes of the 70–75 [legal] m.p.h. Inter-regional highway are blockaded, funneling all traffic towards large, permanent metal awnings (presumably so the authorities can

continued on page 40



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Realizable Fantasies *continued from page 38*

keep cool heads). Just like prison-camp escapees in those war movies about Germany's police-state ID checks at train stations, everyone waits—often in single line, although a dozen or more agents stand around talking to each other.

The stop—many miles *inside* of US borders—is for your unlimited cross-examination and search by Immigration and Naturalization Service and/or Border Patrol and/or Drug Enforcement Agency officials, when and however they choose to have their way with you.

Of course that Constitutional silliness about unreasonable searches of your persons and possessions doesn't apply—you're not in your home—and *everyone* is *presumed* guilty.

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In New Mexico, in mid-day on a Sunday, there were more than fifty cars, trucks, buses and whatnot being punished in the sun until they can prove their innocence.

When I finally got to the front of the single line, they glanced at my old, whitebread face of apparent Northern European heritage, and waved me on with a gruff, unintelligible snarl—said as only a guy with a gun and government authority can say it—and I drove past several families of hapless suspected citizens, who had skin and hair too dark for the acceptability granted to me. They were out of their cars, being properly submissive to The Authorities, far inside the borders of The Land of the Free.

So if you wonder whether those in power can find some excuse—"indecent" content, "terrorist" communications, bomb-making information (chemistry students and quarry operators, beware: California's Senator Dianne Feinstein is hot on the censorship trail, eager to prohibit all distribution of "bomb-making" information, especially on the global Internet, and the legislation has already passed some major votes in Congress), etc.—to conduct massive surveillance and interception of email traffic, presuming that everyone—especially any political opponent—is guilty until proven innocent, be assured: They can and will...unless we again become also The Home of the Brave.

A Physics Question

On a more pleasant note: Do we use less gas when driving south than when driving north? After all, going south should get the aid of being "flung" towards the Equator by the Earth's spin, whereas going north has to "fight" that centrifugal force. (Furthermore, anyone who looks at a world globe knows that things will fall south but must be pushed north—at least, in the Northern Hemisphere.)

Okay, now that I've illustrated my technical competency...

Power Innovators Needed!

In late July, John Gilmore emailed this suggestion. It remains an unrealized fantasy for no identifiable reason other than obsolete decision-makers at uniformly antiquated manufacturers. (Unrelated asides, worthy of note: John was employee #5 at Sun Microsystems, was instrumental in creating Sun's NFS—network file system, and was one of the Electronic

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Realizable Fantasies *continued...*

Frontier Foundation's three original co-founders, but the only one who initially remained anonymous in that laudable claim to fame.)

Said John in his request for improved reality:

"Every *laptop* computer in the world comes with a battery-backed-up power supply. If the AC power goes off, the machine keeps running. You can ride through half-second power glitches, half-hour outages, and marginal rural and international power sources. Your machine stays on the Net if it is interacting with other systems (that is, if your datacomm subsystems can stand the power glitches). You can even unplug the machine and move it to another room or another building without shutting it off.

"But there does not appear to be a single *desktop* personal computer that comes equipped with this feature!

"All clone PCs, and many brand-name PCs, are built with a power supply in a standard form factor, accepting standard power-line voltages and producing standard DC voltages for the computer's components and subsystems.

"But not a single company makes an internal power supply that includes battery backup! Even the companies claiming to build 'servers' for PC-based networks don't include this obviously crucial feature.

The stop—many miles *inside* of US borders—is for your unlimited cross-examination and search by Immigration and Naturalization Service and/or Border Patrol and/or Drug Enforcement Agency officials, when and however they choose to have their way with you.

"Instead, end users have to buy a separate, expensive, bulky, inefficient, country-specific UPS box (uninterruptable power supply) and plug their desktop computer into it."

Gilmore said, "I've tried several major power supply companies, as well as Web searches, and all I get is, 'Nope; that isn't in our product line!'"

Admittedly, power-sucking CRT display monitors will die in a power outage (unless they came with similar UPS plug-in options), but, John notes, his easily-realized fantasy would, "still keep your servers running, or save you from losing your work over short glitches (which are a lot more frequent than half-hour outages)."

Why aren't companies building power supplies in standard form factors for desktop personal computers that allow for battery backup—perhaps with batteries optionally inserted in a standard 3.5" or 5.25" peripheral slot? ■

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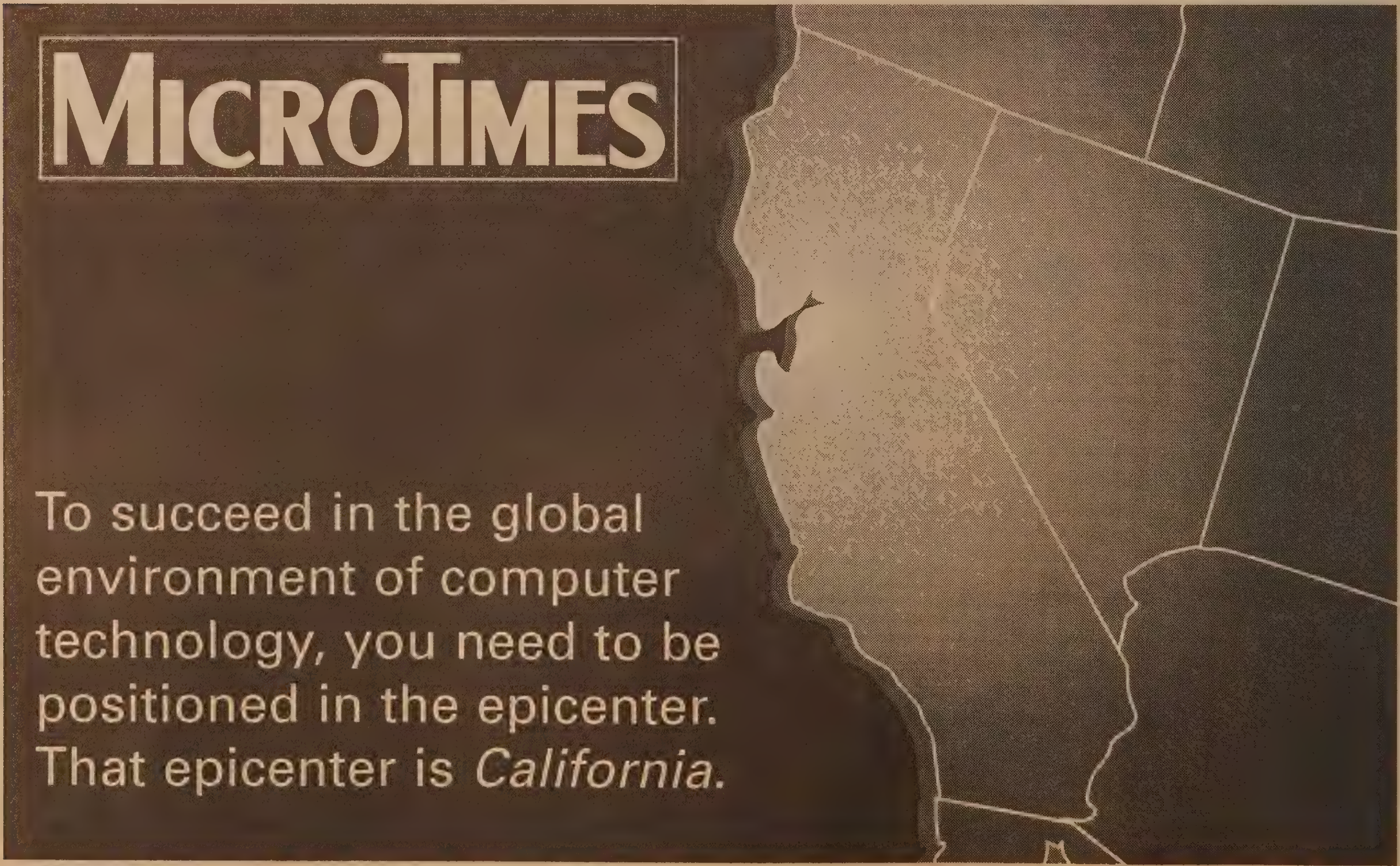
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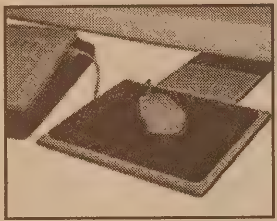

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Letters

Fervor And Zeal: Necessary But Not Sufficient?

Guy Kawasaki has come up with an interesting positioning statement in "Creative tools for creative people." But I would remind Kawasaki that Apple's market share has dwindled from around 12% to close to 3%. Somewhere between 60 and 75% of Apple's former customers are now buying PCs, including the company I work for. Kawasaki's message, that we are telling our employees "that either they aren't creative or creativity isn't desired," has nothing to do with the reason we got rid of our Macs: PCs, even running Windows 3.1, crashed less often.

To be honest, I don't think Apple can win our business back. To do that, they would need to demonstrate that the problems of the past, which they never really acknowledged, have been fixed. In addition, they would need some advantage over our current systems (why change if there isn't some advantage?).

Some time in the future, Kawasaki's message may find receptive ears. For now, unless Apple can address the issues that prompted a majority of their customers to leave, it will, like "Been there, done that," be yet another Apple slogan that misses the point.

Mike Palmer
Laguna Hills, CA

Just as a plaid double-knit-clad salesman might try to convince me that you need his product to be handsome, rich, or sexy, here is a man in front of a P.T. Barnum poster telling me that I can't be creative without his wares. The scene is just too perfect.

I would like to remind Mr. Kawasaki that the creative force in my work is me, not the computer platform on which I work. I would be creative with a clay tablet. Tools might be helpful, but to propose that I can't do creative work without his precious operating system is both laughable and insulting.

It is just this sort of attitude that has crippled the company he represents. And that is sad.

Charles Belcher
via Internet

So, Guy Kawasaki believes Apple's positioning statement should be "Creative tools for creative people"? That might be good for fostering a warm, fuzzy feeling among those of us who already own Macs, but what does it do to alter the facts that there are fewer Mac OS machines to choose from, they're generally more expensive than Wintel machines, and there's much more Windows software and peripherals available than for the Mac? For the large majority of computer buyers, the only thing you can do on a Mac that you can't do on a Windows machine is to savor the sensation of being on a sleek, powerful, luxurious—but nevertheless sinking—ship.

Gordon Lewis
via Internet

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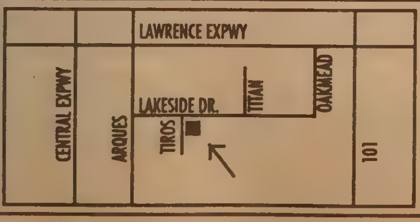

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Laptop Printing Without Cables

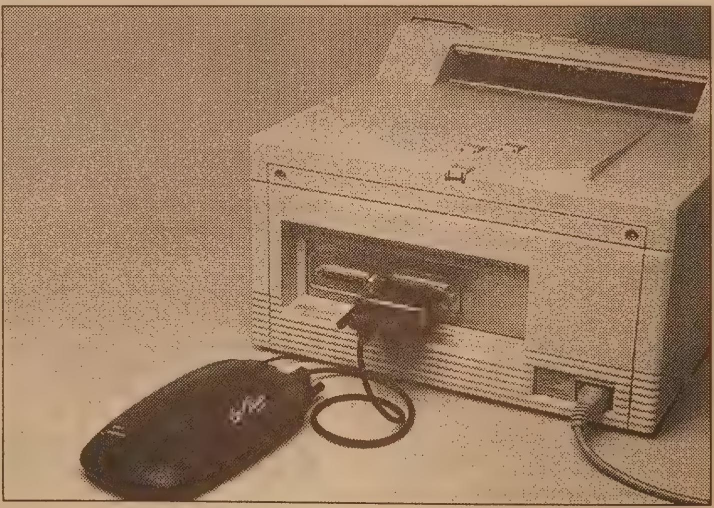
Around The Corner, Down The Hall, Or Through Walls, The GoPrint ONE Lets You Easily Share A Printer

A common annoyance for laptop users is printing. After being on-the-go with your laptop, printing files when you get home can be inconvenient. If you have a desktop computer in addition to a laptop, you will probably have to change the printer cable from the desktop to the laptop or copy files via floppy disks and then print from the desktop. In either case, it is a less than perfect arrangement.

A friend called me recently to tell me about a product that solved this problem. In their house, he has a desktop computer and his wife uses a portable. In order for her to print something at home, she would connect her laptop to the printer in his home office. That was before they discovered GoPrint ONE from AeroComm.

GoPrint ONE uses a radio transmitter/receiver and works like a dream. Installation is amazingly simple: you plug one cable from the printer, another cable from the computer's printer port, and the GoPrint ONE printer module into a three-way automatic switch. There is nothing else you need to do to the desktop computer—it will work just like it always has. On the portable, all you need to do is plug the GoPrint ONE sending unit into the printer port. Afterwards, whichever computer you print from, the printer will recognize the file and print it.

There are many other wonderful features to the GoPrint ONE. For instance, it work up to 125′ traveling through walls and floors. If the system is installed within a large work area with no obstruction, the signal will carry up to 400′. In the case of my friend, his wife can issue a print command from her laptop in her office without going into her husband's office and switch the cables around. There are no switches to set, no wires to string, no software files to install. You simply set up the satellite computer to print to the printer you will be using, just as if it were attached to your computer. The automatic switch senses which computer is sending the print file. If the printer is in use when the file arrives, the print job is queued until the printer is free.



The whole package is relatively small. The sending and receiving modules look identical, except that one says "printer" and the other says "computer". Each is about 7" x 4" x 2" and weighs a few ounces. A power supply for each module is included. For laptops, there is a small laptop power cable that plugs into the keyboard port and provides power to the GoPrint ONE module. If you ask, AeroComm will substitute this cable for the second power supply, otherwise the cable is available for $15. This cable uses a pass-through plug so that you can still use an external keyboard or mouse. The team at AeroComm have thought of almost everything. Cables, power supplies and the automatic switch are bundled in the Small Office Pack ($219).

AeroComm has really designed a product that has a much wider application than just for laptop users. It is an excellent choice for offices that have many computers, but are not networked. GoPrint ONE supports up to sixteen sender modules for each printer. In a small office that shares a printer, this is a much simpler solution than installing a network or wiring in all of the computers to a central printer. It also means that

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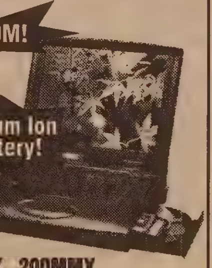

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> —Troy D. Brown, Forensic Analytical

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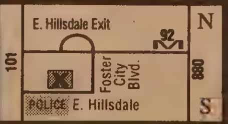

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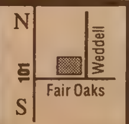

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Laptops *continued...*

office design can be easily modified without considering where wires run. I suspect that this solution is also a good deal more economical in the long run because you will save the expense of network cards, cables, and the installation of the hardware.

For larger offices, AeroComm offers the GoPrint XL, which supports up to sixty-four PCs and six printers. This system requires software, but remains simple to install. It will work in a networked environment, but lets you avoid much of the complication of printing via a network. The XL system also lets you designate which printer you want to use. This is convenient, for instance, if one printer handles color, or printers are scattered through the office, or the work team nearest you is printing a long report and you have a short cover letter to get into FedEx tonight.

The GoPrint ONE was truly plug-and-play. But, if you do have trouble, the folks at AeroComm are there to help you. If you are considering trying out this product, call AeroComm and they will discuss your situation and the parts you want to best fit your needs. The system is flexible enough that AeroComm wants to make sure you get just the parts you need to give you what you want.

GoPrint ONE works flawlessly and transparently. Once installed, you will never know that anything has changed on your system except that you will be able to print from multiple computers to a single printer.

At first, I thought this was a pretty specialized product, but after reading the literature and working with it, I see that there are many places where the GoPrint ONE is a good solution.

In a small office that shares a printer, this is a much simpler solution than installing a network or wiring in all of the computers to a central printer.

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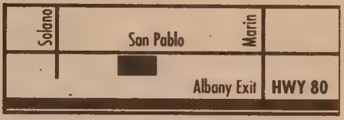

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- Intel Venus Motherboard
- 32MB EDO RAM
- 1.44MB Floppy Drive
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- 16X Toshiba CD-ROM
- 4MB Matrox Millennium
- Sound Blaster 64 PnP
- 120 Watt Speaker
- US Robotics 33.6 w/Voice
- Mid-Tower Case
- Keytronic 104 Keyboard
- 17" Impression .27 Monitor
- Windows 95 CD
- Microsoft Mouse

$2599

DJ COMPUTERS P5 MULTIMEDIA 200MHz

- 200Mhz Pentium® MMX Processor w/Fan
- Pentium® Chip-based Motherboard w/512K Cache
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- MGA Millennium 2MB WRAM
- Sound Blaster 32 PnP Sound Card
- 120 Watt Speaker
- 33.6 w/Voice
- Mid-Tower Case
- 17" Impression .27 Monitor
- Microsoft Mousew/Pad
- Windows 95 CD

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DJ COMPUTERS P5 A.S.S. GREEN PCI SYSTEM

- 133Mhz Pentium® Processor w/Fan
- Pentium® Chip-based Motherboard w/256K Cache
- 32MB 72-Pin RAM
- 1.44MB Mitsumi Floppy Drive
- 2.0GB IDE Hard Drive
- 12X CD-ROM •S3 2MB SVGA Card
- 33.6 Fax Modem
- 15".28 Impression Plus NI SVGA Monitor
- Hi-Speed 2 Serial, 1 Parallel, 1 Game Port
- Hi-Speed IDE Controller on Board
- 120 Watt Speaker
- Mini-Tower Case w/200W Power Supply
- Microsoft Mousew/Pad

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- 100Mhz Pentium® Processor w/Fan
- Pentium® Chip-based Motherboard w/256K Cache
- 16MB 72-Pin RAM
- 1.44MB Mitsumi Floppy Drive
- 1.2GB IDE Hard Drive
- 12X CD-ROM •S3 2MB SVGA Card
- 33.6 Fax Modem
- 14".28 Impression SVGA Monitor
- Hi-Speed 2 Serial, 1 Parallel, 1 Game Port
- Hi-Speed IDE Controller on Board
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Computer Of The Month

Texas Instruments TravelMate 7060

Texas Instruments was an important player in the laptop field for many years, but sold its laptop division to Acer America and exited this part of the marketplace. The first offerings by Acer America using the Texas Instruments TravelMate nameplate are impressive. This month, I review a top-of-the-line laptop from Acer—the TravelMate 7060.

This is no lightweight—in either features or weight. It weighs 7.5 lbs. including its Lithium Ion battery. But the tradeoff for this heftier computer is a great-feeling keyboard and a wealth of features.

The 7060 measuring 12.2" x 9.4" x 2.2", comes standard with 32MB of RAM, expandable up to 64MB, a 2GB hard drive, and a Pentium 166MHz processor with MMX. A 10X CD-ROM drive fills the bay on the right side. While a removable floppy drive is also included, it is often easier to use the supplied parallel cable to move files around. I think Acer has made the right decision letting you decide whether to carry the floppy or CD-ROM drive. CD-ROMs are increasingly more important than the floppy drive. Still, you have a floppy drive for those occasions when you need one.

The keyboard is well-designed and has a good touch and feel. When you open the lid of the laptop, the back of the keyboard raises just enough to give the keyboard a pleasant forward tilt for easy typing. If you prefer to use a full-size keyboard, it attaches easily through the port on the back of the computer. Acer has packed a lot of features into the keyboard by assigning additional functions to the twelve function keys. Using the Fn key in addition to the keys themselves accesses these additional functions. Acer uses a touchpad in lieu of a mouse.

The TravelMate 7060 is no lightweight—in either features or weight.

When I first received the TravelMate 7060, I spent an unusually long time searching for the power switch. I searched and searched, refusing to consult the documentation to learn how to turn the computer on. Finally, I realized that there was no on/off switch. Rather, when you raise the top, the computer automatically turns on. Likewise, when you close the lid, everything is saved just as you left it for your next session. You can either save your screen to a place on the hard disk or in memory. This option is up to the user. Many subcompact notebooks already offer this feature and it is nice to see it on this laptop.

Acer also designed a terrific power management system. At the heart of the system is the Lithium Ion battery, which they boast will last between six and seven hours. Additional batteries ($249) are available. There are three ways to know how much power your battery has left. One is a gauge that you can access through the function keys; another is through Windows 95 and finally, you can remove the battery from the computer and push a button that will light up diodes that show you how much juice is left in the battery.

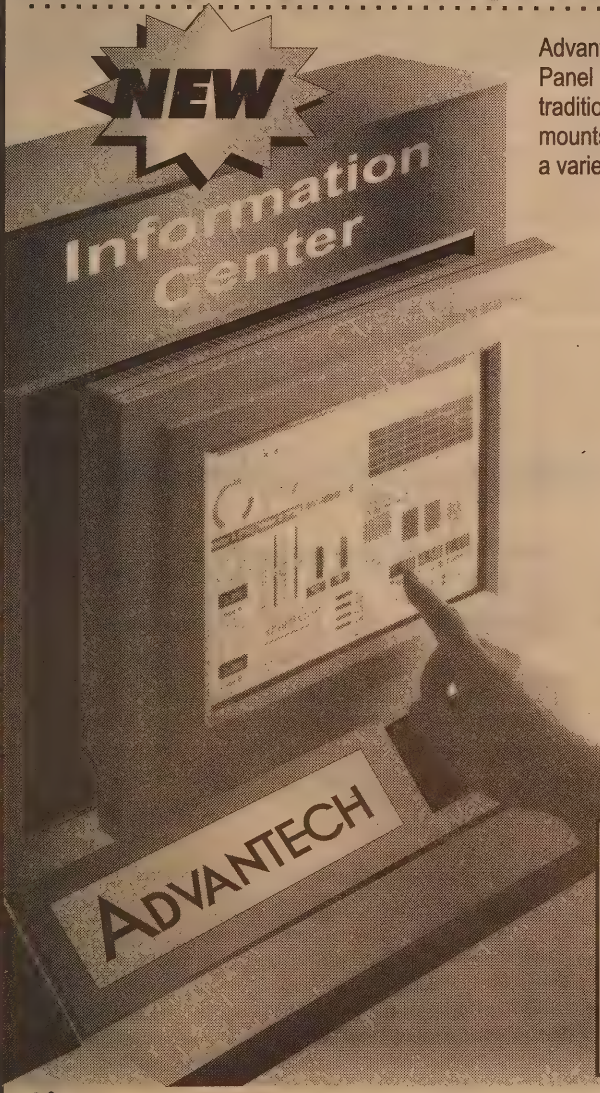
The active-color display measures 12.1" diagonally. If you want to connect an external monitor, it is simple to do so through the port on the back. If you do use an external monitor, you can toggle, again through the function keys, between the built-in display, the external monitor, or both. With the external monitor attached, the system does not turn off when you close the cover. This is good because it lets you close the computer and work with a full-size monitor and keyboard.

The TravelMate 7060 comes with an excellent 33.6Kbps data/fax/voice modem that lets you

continued on page 56

Your One-call Source for Industrial Computers

Multi-purpose SuperSlim Panel PC



Advantech's ultra thin, ready to run user interface Panel PC is the state-of-the-art alternative to a traditional commercial PC. This compact PC mounts with ease, making it an ideal solution for a variety of applications.

Applications

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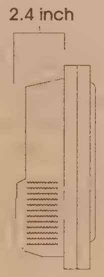
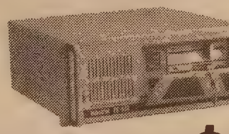


Features

- 10.4" TFT LCD Display (640 x480)
- 3x RS-232 and 1 x RS-232/422/485 communication capabilities
- 4 isolated input and output channels
- 10 Base-T Ethernet Interface
- Spill-resistant front panels (NEMA 4/12)

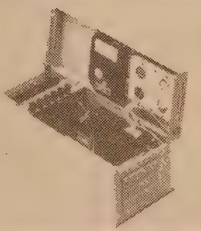
IPC-610 Rackmount Industrial PC



- 14-slot ISA/PCI backplane
- Baby AT version available
- Supports two 5.25" and two 3.5" disk drives
- 250W Power Supply

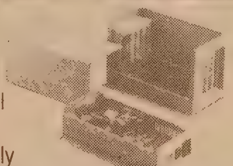
$295

IPC-6806 Compact Wall Mount PC



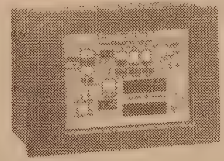
- 6-slot ISA/PCI backplane
- Supports two drives
- Cooling fan with air filter
- 150W Power Supply

MBPC-641 MicroBox PC



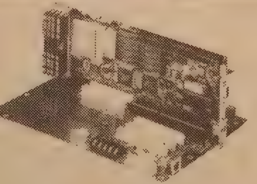
- 4-slot ISA-bus backplane
- Ultra compact for embedded control
- Cooling fan
- 65W Power Supply

MiPC-51 Workstation w/TFT LCD Display



- 4-slot ISA bus backplane
- Supports two 3.5" drives
- 640x480 TFT Color LCD
- 65W Power Supply

CPU cards



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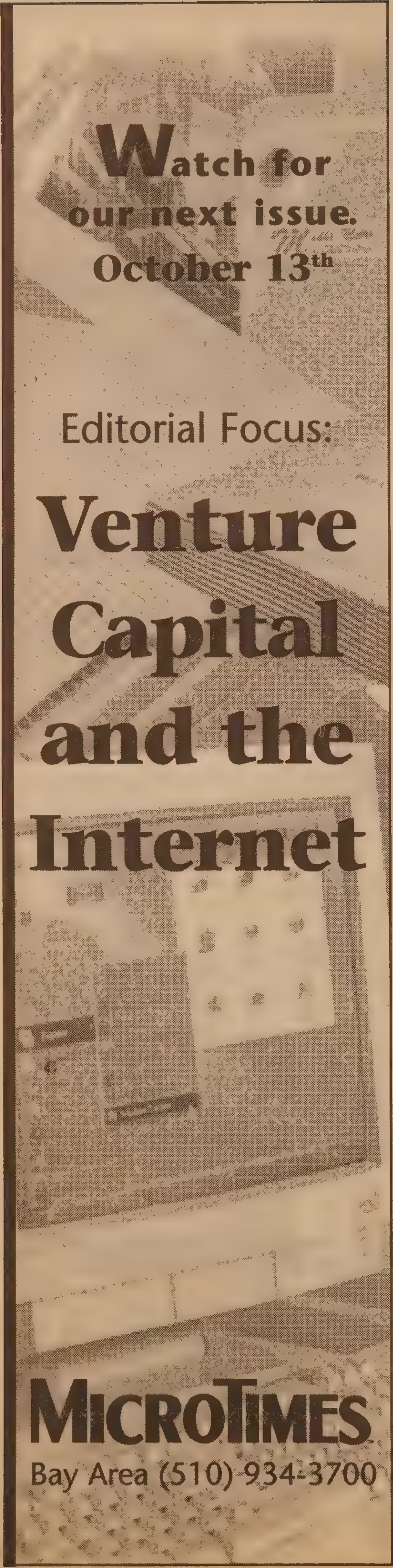

Watch for our next issue. October 13th

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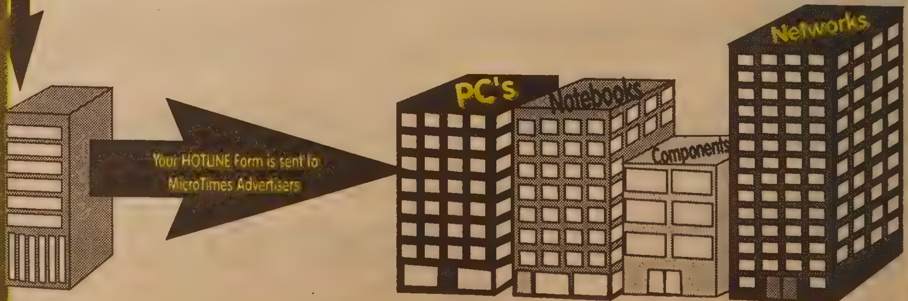
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Last Name

Company Name

Title

Address

City

State

Zip Code

Area Code Phone Number - -

Area Code Fax Number - -

E-Mail Address

E-mail address (continued)

Number of Employees
○ 1 to 10 ○ 50 to 100
○ 10 to 50 ○ Over 100

What is Your Purchase Time Frame?
○ 1 Week ○ 3 Weeks
○ 2 Weeks ○ 4 Weeks

Please Rank Your Choice
H=High L=Low
Ⓗ Ⓛ Price Ⓗ Ⓛ Service
Ⓗ Ⓛ Reseller Ⓗ Ⓛ Warranty
Ⓗ Ⓛ Onsite Support
Ⓗ Ⓛ Compatibles
Ⓗ Ⓛ Brand Name

To Be Used Where ? ○ Business ○ Home ○ Network

I Would Like To Receive My Quotation Sent To Me By:
○ Fax ○ Phone ○ E Mail ○ Mail

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① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨

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STEP ONE: PICK A SYSTEM.
○ PC COMPATIBLE ○ MACINTOSH
○ PC NAME BRAND ○ Network WORKSTATION
○ PC NOTEBOOK ○ Network FILESERVER
○ MACINTOSH NOTEBOOK

PICK YOUR PREFERENCES
○ Name Brand
○ Compatibles
○ No Preference

Step 1: Enter PC System Brand Name & Model #. If Preference

Step 1: Enter NoteBook Brand Name & Model #. If Preference

Quantity / Choices
① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ My Budget For System Is ○ Under $1000 ○ $1000 to $1999 ○ $2000 to $2999 ○ $3000 to $3999 ○ $4000 to $4999 ○ Over $5000
10 or More ○ Call Me For A More Detailed Quote. ○ Quote Me For Selected Upgrade/Peripherals Choices Only. ○

STEP TWO: SYSTEM CONFIGURATION: ○ INTEL ○ PENTIUM MMX ○ DUAL CPU'S ○ PENTIUM PRO ○ PENTIUM ○ 486 ○ AMD ○ CYRIX
○ MACPOWER PC ○ MAC QUADRA/PERFORMA

CPU MHz & SPEED:
○ DX4 ○ DX2 ○ DX ○ 5X86 ○ 6X86 ○ Quadra ○ PowerPC
○ 200 ○ 180 ○ 166 ○ 150 ○ 133 ○ 120 ○ 100 ○ 80 ○ 75 ○ 66

BUS TYPE ○ PCI ○ VLB ○ EISA ○ ISA

CACHE ○ 64K ○ 128K ○ 256K ○ 512K

RAM: ○ EDO ○ 2MB ○ 4MB ○ 8MB ○ 16MB ○ 32MB ○ 64MB ○ 128MB

HARD DISK DRIVE: ○ 100MB+ ○ 800MB+ ○ 1GB+ ○ 2.5GB+ ○ 4GB+
○ IDE ○ SCSI ○ ZIP DR ○ JAZZ ○ 2GB+ ○ 3GB+ ○ 6GB+

MONITOR: ○ SVGA ○ VGA ○ MONO ○ 26 DPI
○ 14" ○ 15" ○ 17" ○ Non Interlace ○ 28 DPI
○ 20" ○ 21" ○ Multisync

FLOPPY DRIVE: ○ 1.44MB
and/or ○ 1.2MB

FAX MODEM: ○ Internal ○ External
○ 33600bps ○ 14400bps ○ 28800bps

CASE TYPE: ○ Mid Tower
○ Desktop ○ Full Tower

VIDEO CARD RAM ○ 512KB
○ 1MB ○ 2MB ○ 3MB ○ 4MB

POINTING INPUT DEVICES: ○ Any Mouse ○ MS Mouse ○ Keyboard
○ Serial ○ Bus ○ PS2 ○ Trackball ○ Joystick ○ Ball Point ○ Pen

OPERATING SYSTEM NEEDED: ○ Windows 95 ○ OS2/Warp
○ Win NT ○ Mac ○ UNIX ○ DOS/Windows 3.11

STEP THREE: MULTIMEDIA UPGRADE ○ Please Add To Step 1 & 2 Quotation ○ Please Quote Me Separately

CD ROM DRIVE: ○ Internal
○ IDE ○ SCSI ○ External
CD ROM TITLES INCLUDED:
○ 1-5 ○ 5-10 ○ 11+

○ 6X
○ 8X
○ 10X
○ 12X
○ 16x

○ BRAND NAME ○ No Brand Name Preference
CD ROM Brand Name and Model Number

SOUND CARD
○ 16Bit
○ 32Bit

SPEAKERS
○ Less Than 25W
○ 25 to 50W
○ 50 to 75W
○ More Than 75W

STEP FOUR: NOTEBOOK SECTION - Please Note You Must Make Choices In Steps 1 & 2 To Complete Step 4

SCREEN TYPE: ○ 10" ○ 11' ○ 12'
○ Active Color ○ Dual Scan ○ 13'

PCMCIA SLOT:
○ Type II ○ Type III ○ Type IV

○ Audio Capable ○ Docking Station ○ Extra Battery
○ Fax Modem ○ CD\MultiMedia

STEP FIVE: NETWORKING NEEDS: ○ Please Contact Me on My Networking Needs Indicated Below
○ Software ○ Hardware ○ Consultation ○ Design ○ Installation ○ Administration ○ MS Workgroups
○ Users 2 to 10 ○ Users 10 to 50 ○ Users Over 50 ○ Lantastic ○ Apple Talk ○ Novell ○ MS NT

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STEP SIX: UPGRADES & PERIPHERALS: ○ Ink Jet Printer ○ Tape Backup ○ Accelerator ○ Digitizer
○ Laser Printer ○ Color Printer ○ Dot Matrix Printer ○ Flat Bed Scanner ○ Hand Scanner

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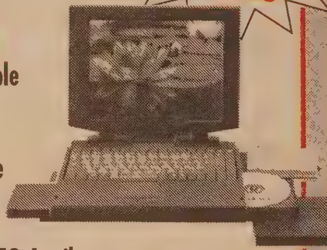

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12.1" Dual Scan w/ 16MB OPTIONAL CD-ROM	P150MHz	$1479	$1579
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	P200MHz	$1669	$1749
	P166MMX	$1609	$1699
	P200MMX	$1719	$1799
	P233MMX	$1819	$1919

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- Supports CarBus & Zoom Video
- 10X Fast CD-ROM (Optional)
- 16-Bit Full Duplex 3D Sound Card
- Smart Battery with Battery Gas Gauge Indicator

Display	CPU Type	1.3GB	2.0GB
12.1" TFT w/ 16MB Optional CD-ROM	P150MHz	$1999	$2099
	P200MHz	$2145	$2245
	P166MMX	$2099	$2175
	P200MMX	$2199	$2299
	P233MMX	$2345	$2445

ChemBook Big Screen 2700 Notebook

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- 13.3" /14.2" Active Color Screen
- Memory Expandable to 128MB
- PCI 2MB/4MB EDO Video RAM
- Supports CarBus & Zoom Video
- 10X/16X/20X CD-ROM
- 16-Bit Full Duplex PnP 3D Sound Card
- TV Out Function
- 2-Type II & 1-Type III PCMCIA Slots

Display	CPU Type	1.3GB	2.0GB
14.2" Active Color w/ 16MB & 20X CD-ROM	P150MHz	$3419	$3499
	P200MHz	$3519	$3619
	P166MMX	$3479	$3559
	P200MMX	$3589	$3679
	P233MMX	$3709	$3799

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- Mid Tower Case w/250W PS
- 104 Win 95 Enhanced Keyboard
- Mouse
- MS Windows 95

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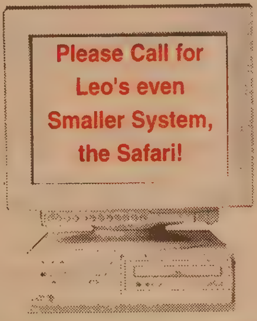
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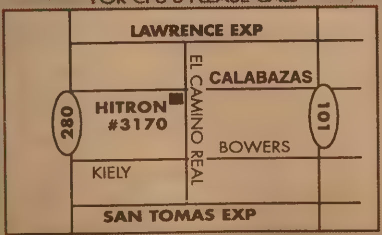

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continued from page 50

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> When I first received the TravelMate 7060, I spent an unusually long time searching for the power switch....Finally, I realized that there was no on/off switch. Rather, when you raise the top, the computer automatically turns on.

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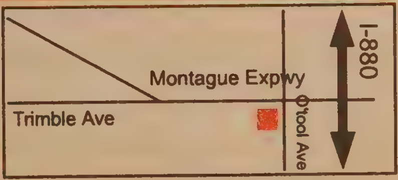

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Dynamic Web Stuff

Hapless and Mephistopheles

A few months ago, Hapless (his career wandering aimlessly through the vast desert of his employer's Org. Chart) found himself responsible for creating Web pages. Being a devotee of the "vi" editor, Hapless built Web pages by hand, inserting HTML tags around text he was given.

The first two or three pages Hapless built were great fun, but after creating pages for a dozen or so Web sites, the novelty of writing HTML wore off.

When some of Hapless' early customers returned with requests for new versions of the Web pages Hapless had built, the absence of novelty gave way to irritation. It was one thing to design a Web page from scratch and quite another to add something new to an existing page without breaking it.

> *When some of Hapless' early customers returned with requests for new versions of the Web pages Hapless had built,* ***the absence of novelty gave way to irritation.*** *It was one thing to design a Web page from scratch and quite another to add something new to an existing page without breaking it.*

And so it happened that one recent Wednesday evening found Hapless in his cube muttering dire imprecations at the screen in front of him trying to make sense of the blizzard of "<" and ">" marks in a Web page.

From somewhere behind him there was the sound of a throat being cleared ostentatiously, but Hapless paid no attention. Eventually an overly polite voice interrupted him: "Did you, uh, call for me?"

A Visitor

Hapless turned to see a short, bald man in a black cloak standing in the entrance to his cube.

"I don't recall calling for anyone," Hapless snapped.

"No doubt. Still, I never go where I'm not wanted. You seem to be a frustrated Web developer. Perhaps I could be of assistance. Please allow me to introduce myself." The stranger proffered a card which Hapless took mechanically and set aside unexamined.

"You seem," the stranger continued, looking at Hapless' monitor, "to be at an impasse."

"Uh-huh."

"You know, this whole business of building Web pages would be a lot simpler with dynamic content."

"What?"

"Dynamic content. Dynamic content. Just look at that screen in front of you, and what do you see?"

"A mess?" Hapless ventured.

"No, no, no. You see form and you see content: the HTML tags are the form and the text between the tags is the content."

"Okay. So what?"

"So your job would be a lot easier if the form could stay the same while the content varied."

"My job would be easier?"

"Of course it would! Right now, I'll bet you write a separate HTML page for every piece of content on your site. These are 'static' pages. You have to write each one by hand. They're files in which everything, both the form and the content, are hard-coded.

"Now imagine how things would be with dynamic content. Instead of writing all those static pages, you would write a handful of templates."

"What's a template?" Hapless asked suspiciously.

"A template," the stranger replied, "is basically an HTML page that contains placeholders for variable content. When someone hits one of these pages, the right content is retrieved, substituted for the placeholders. The actual page that the user sees is assembled when it's requested."

"And just what do these templates look like?"

"The simplest sort of template would look something like this," the stranger replied. He scribbled on Hapless' whiteboard:

```
<html> <body> <h1>$title</h1> $text </html>
```

"This template is nothing but HTML tags (in angle brackets) and variable names representing different pieces of dynamic content ('$title' and '$text' in this case)."

"And how does my Web server know what to do with a template?"

"Well, strictly speaking your Web server doesn't know anything about templates. You need a piece of software that plugs into your Web server and interprets the templates. The Web server is configured to hand off any URLs for dynamically generated pages to this server-side program. The program does its work and hands a stream of HTML back to the server."

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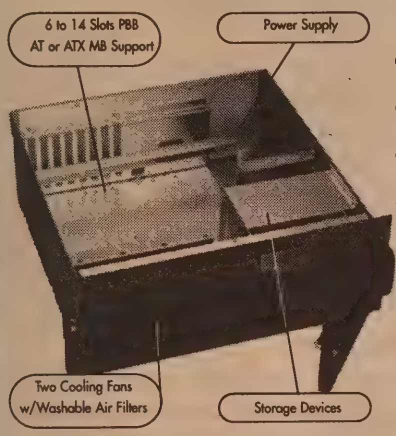
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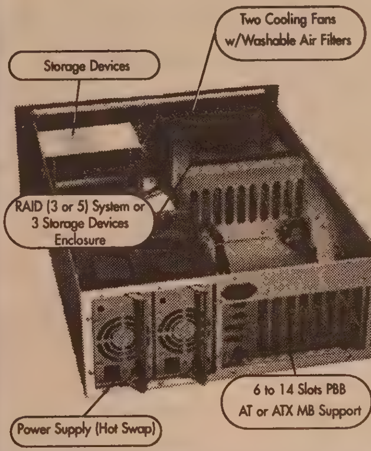
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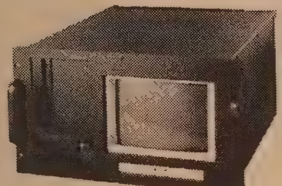

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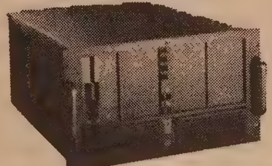

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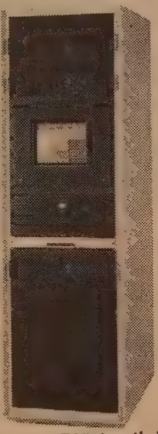

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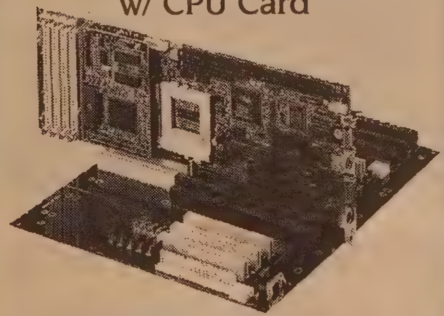

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"Ah," said Hapless. "And no doubt I could get this software from you?"

The stranger smiled broadly and slipped a hand into an inside pocket of his cloak. A moment later the smile faded and he withdrew an empty hand.

"Hmpff. Apparently not. I seem to be out of software at the moment, but never mind, there are many fine vendors who will be happy to get you started in the world of dynamic content. Just search Altavista for 'Dynamic Web content'." He turned as if to go, but Hapless stopped him.

Philosophy Meets HTML

"Wait a minute. There are one or two things I still don't understand about this dynamic content business. For example, just what exactly is the difference between form and content?"

The stranger turned back to face Hapless and looked perturbed. "Well, form is form: you know, formatting. And content is the thing being formatted."

"But," Hapless responded, "look at your example again. What would happen if the $text variable happened to contain some HTML?"

"Well, that would just be included with the page when the server returned it to the browser."

"Which means that I could have dynamic HTML as well as dynamic content."

"I don't follow you," the stranger replied.

"Well, the way you described it, 'dynamic content' seems to be just a way of interpreting variables in HTML pages. But the value of a variable could be anything: It could be content or it could be HTML. It could even be some combination of the two." Alongside the example on the whiteboard, Hapless wrote:

$begin_tag $title $text $end_tag

"What," Hapless continued, "would keep you from building an entire page that consisted of nothing but variables?"

The little man in the black cloak looked glumly at the whiteboard. "Nothing, I suppose."

"By the way," Hapless continued, "how do these variables get defined and have values assigned to them?"

The little man sighed heavily. "Well," he said, "that all depends on whose software you're using. Most of the dynamic content products on the market depend on server-side programming to declare and populate the variable portions of a template. They run as CGI programs or, for Microsoft and Netscape, they use the Web server's native API.

"Most vendors' products use a scripting language of some kind. Of course there are a lot of scripting languages and consequently, there's a lot of variation from one vendor to the next. You'll find products that use Perl, JavaScript, Tcl, Python, VB Script and the like."

"Now we're talking!" Hapless exclaimed, his interest finally piqued. "I don't have to write the HTML. I can write a program to generate the HTML for me!"

"Yes, something like that," the stranger agreed half-heartedly. "If you had a product to do serv-

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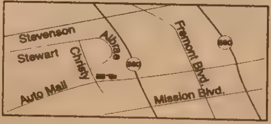

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UNIX *continued...*

er-side JavaScript, for example, your templates might look like this."

He stepped to the whiteboard and wrote:

```
<server> mycontent = "The page content goes here.";
write("<HTML><BODY>" + mycontent + "</BODY></HTML>");
</server>
```

"This template just consists of a program (everything between the <server> and </server> tags) to be run by the server's JavaScript interpreter. This template generates all the HTML that is returned to the user. You could also mix hard-coded HTML and dynamically generated HTML in the same template."

Hapless seemed pleased. "So far, so good," he said. "Now tell me, where does the content come from?"

"Excuse me?" the stranger replied.

"The content, the content," Hapless continued. "Where does the content come from?"

"Well, that's up to you," the stranger replied peevishly. "It's your content. If you want it to come from a file, you can probably do the whole thing with CGI scripts written in Perl. If your content is in a database, you should get a dynamic content generator that can connect to your database of choice. I'm sure all the database vendors have such things."

> *"And how does my Web server know what to do with a template?"*
> *"Well, strictly speaking your Web server* ***doesn't know anything*** *about templates. You need a piece of software that plugs into your Web server and interprets the templates."*

"Aha," said Hapless, "that's what I need: a server-side program that understands a scripting language and can act as a client for the database manager I use."

The little man shrugged. "Well, if you say so."

"Yes, yes. Don't you see? I can manage the content in the database and use the templates to execute queries to get content out of the database and merge it with HTML. I'll bet I can even move some of the HTML into the database itself."

"Okay."

"You're sure you don't have any software?"

The stranger stuffed his hand deep into the inner pocket of his cloak and groped about for a second. In a moment, his hand emerged with a shiny gold CD which he handed to Hapless.

"Here," he said, "this should do the trick."

Hapless greedily took the CD and flopped in his chair to install his new prize.

"Don't forget to read the license agreement," the stranger warned, but Hapless paid no attention.

Unnoticed, the stranger turned and walked away muttering, "Temptation was a heck of a lot more fun when there were only seven deadly sins." ■

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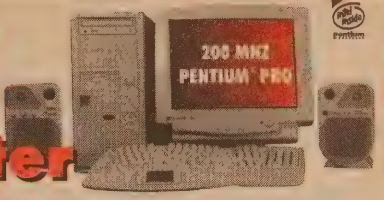

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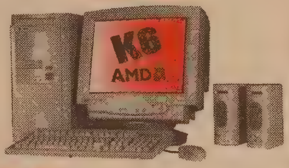

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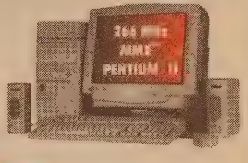

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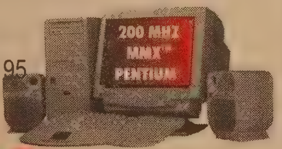

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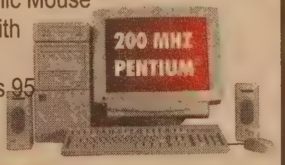

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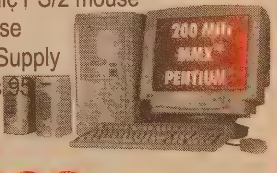

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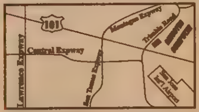

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Visual Basic For Applications

Powerful, Wide-Ranging...And Painful To Use

Ten years ago, a busy software developer took time to write an article for the Summer 1987 issue of *BYTE Magazine*. He wanted to criticize the macro languages in which often-used routines could be recorded and automated. He found they had three failings:

"First," he wrote, "too many of them exist. Each specific application has its unique macro language, creating problems for those who must learn several different macro languages. Second, each macro language is bound to an individual application. No existing macro language lets you call routines from several different applications. Third, macro languages do not have the power and flexibility of traditional programming languages."

In one short paragraph, the author had found what was wrong with macro languages. People had been using them to do remarkable things, particularly in the then-dominant Lotus 1-2-3 spreadsheet. But all the work had to be begun again if the user wanted to work in Microsoft Word or a database. And (though there were some ingenious workarounds) no macro language had the flexibility of even a simple programming language.

Most essays of this sort would be read and agreed with, and forgotten by Labor Day. But because the author was Bill Gates, this 1987 article became a blueprint for a decade of research at Microsoft. In the Office 97 suite, it has borne fruit. The separate macro languages for Microsoft Word, PowerPoint, Excel and Access have been replaced with a single scripting tool, provided free with each application (except Outlook). Routines in one application are capable of summoning data and functions from other compliant applications. And the new scripting language is as powerful as the company's standalone Visual Basic—because in fact it *is* Visual Basic, in a special version called Visual Basic for Applications.

Last month we talked about "agents," a class of software that connects systems and automates work. In many ways agents are the successors of macros. They are different, however, in that they often work between systems. They may connect one application with another, a local program with another on a network, or two computers on different platforms linked only by the Internet.

> The whole point of agents is that they are mobile, going from one part of the computer world to another and doing your bidding.

We looked at Apple's extremely user-friendly AppleScript, and proposed three tests for any agent languages. First, they should have power—the ability to do things, to access and manipulate data and deliver it where you need it. Second, they should be friendly—a user should be able to build and deploy an agent without spending the whole summer on the project. Friendliness includes good documentation, a pleasant and comprehensible set of rules, and easy access to the included tools. Finally, an agent language should have range. Range means that it can travel between and connect many systems. The whole point of agents is that they are mobile, going from one part of the computer world to another and doing your bidding.

In the second of our articles on agent languages, we are looking this month at Microsoft's VBA, one of three flavors of Visual Basic currently on the market. One is the standalone language, Visual Basic 5. It has made significant changes in each new version, and it is now a very powerful object-oriented language for the Windows user. Visual Basic is probably the easiest way to program in Windows. VBScript is a subset of Visual Basic, used to control applications that are not fully accessible to automation through VBA. It is, in part, Microsoft's answer to Netscape's JavaScript language for Web pages. I have not used VBScript, so I cannot say much about it.

Visual Basic for Applications is the third member of the family. It is included with Microsoft Word, Excel, Access and PowerPoint for Windows 95, NT and the Mac. A Developer Edition of the Office Suite includes documentation, a free run-time engine for Access, and numerous other tools and goodies. VBA is also being called "version 5" to make its numbers track with the standalone Visual Basic language.

Power

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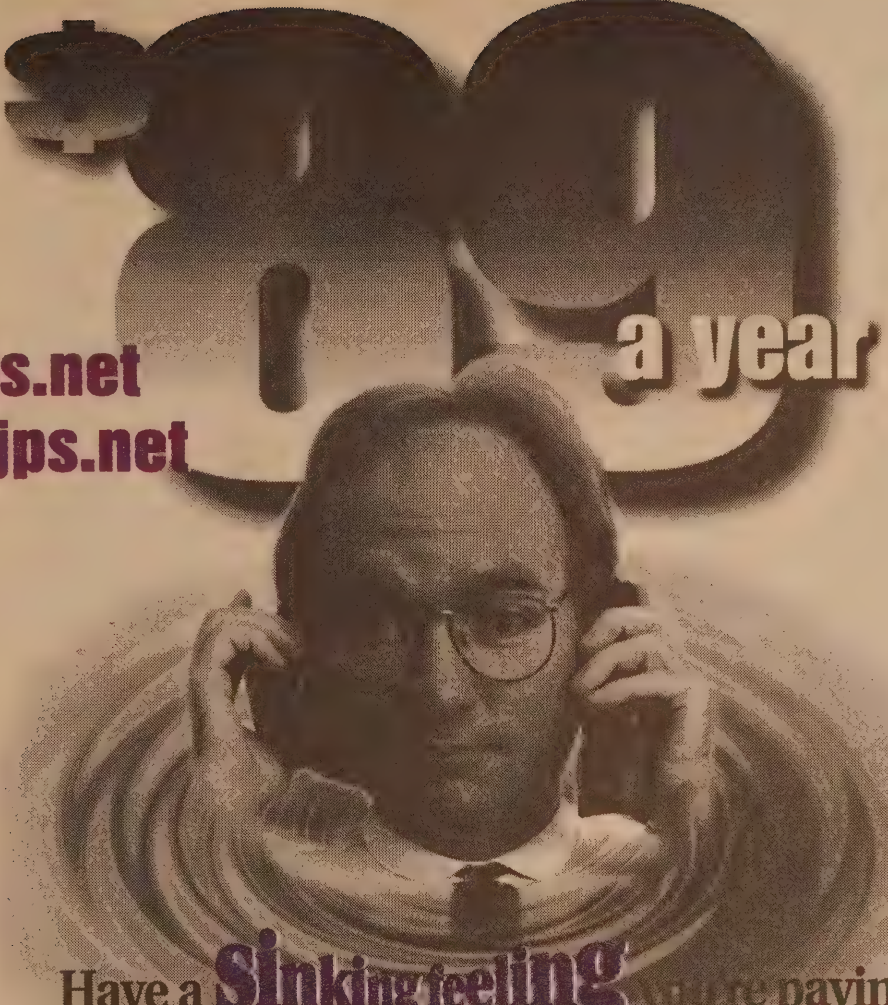

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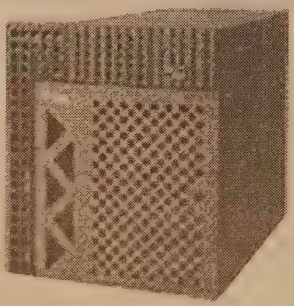

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structures and data structures of Visual Basic. It also has access to the data and functions of the various applications, individually and in combination.

Users of Visual Basic will already have a working knowledge of the control and data-structures of VBA, saving time in their training. They will have a good deal of Visual Basic code they can reuse. And they are able to call on the many third-party providers who have written code and DLLs for Visual Basic. This is not a trivial advantage: the latest Programmer's Paradise catalogue lists seven pages of Visual Basic tools, and only six pages for C and C++. It is often cost-effective to buy something ready-made, rather than to develop it yourself.

Whenever reviewing a system, I try to do a project in it so I can speak from experience. My brother-in-law is by day a system administrator, and by night a Shakespearean actor. This month's project was to adapt a Shakespearean Insult Generator which has been traveling around the Internet, so he could use it in his Microsoft Word documents.

Earlier work I had done building a random-phrase generator in Visual Basic was immediately reusable in this project. I was able to take the random-selection code without modification from the Visual Basic project.

I tried to design the Shakespearean Insult Generator so that it could be modified and used for other projects. Random phrase generators work by taking words from lists and combining them. I could have used the arrays that are available to VBA users to store the components of the insults. But to make the project more generally useful, I stored the arrays of components as columns of data in an Excel worksheet.

VBA gave me four different ways I could get to that Excel data. I could use Dynamic Data Exchange (DDE) commands, supported mostly because they were Microsoft's first method of trading data among applications; many legacy apps still use them. I could embed the Excel worksheet in my Word Document. I could "Link" the Excel worksheet to the document, a procedure similar to embedding but allowing the worksheet to be updated from outside. Or I could use the newer "GetObject" command. It gives me access to the Excel file from within Word, without having to embed the Excel file in the Word document.

Once I have the connection, I am able to issue Excel VBA commands from within Word VBA, and bring the data into Word. I am actually using a single VBA engine running in both applications, at a significant saving of RAM. Because I have access to all the tools of Excel VBA through the getObject command, I have what is functionally a single "superapp" made up of Word, Excel, and VBA.

I am using this superapp in the simplest possible way—to choose data at random from each of three columns in the Excel worksheet, and then to type the resulting phrase into the Word Document. The whole process is triggered by a custom button labeled "Insult!" which I installed on my Word toolbar. I try it and get "bawdy beetle-headed flirt-gill" and "artless dread-bolted apple-john" and "errant fat-kidneyed clotpole." Shakespeare would be proud.

There is no reason why the VBA superapp need be so simple. VBA can respond to events as well as to direct commands and button-pushes. The Excel worksheet in which I am storing the parts of the

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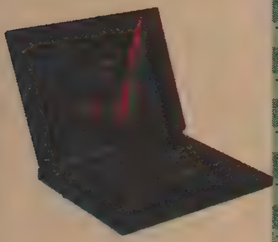

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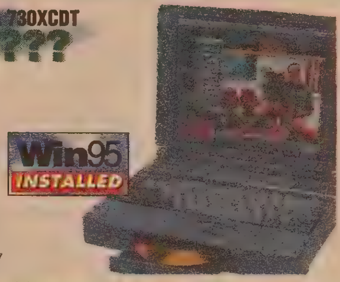

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Shakespearean insults could have had self-updating sales information, or the latest finalists in a random drawing. My process would work on any spreadsheet, with any data; more than one process could be going on at the same time, so that each component application and its VBA routines are interlocking in different ways. Imagine a VBA program that produces new PowerPoint presentations every time the Excel data changes in significant ways, while Word formats an executive summary.

Range

One of the criteria for an agent language is "range"—the variety of applications and environments that it can link together. By this standard, VBA does very well indeed.

At this point, the actual count of applications that VBA can link together is rather small—a number of Microsoft's programs, plus about forty-three third-party applications (according to the list Microsoft's flack sent to me.) The number will grow, though—Microsoft's strategy is "VB Everywhere," and they hope to license the product to a large number of companies.

> **Visual Basic** for Applications is so **effective** because it "exposes" the objects that **actually make** applications run. But having objects **exposed** is like having the workings of a **sausage factory** exposed—you **quickly regret** knowing.

The main applications now linked are those of the Microsoft Office—Microsoft Word, Microsoft Excel, Microsoft PowerPoint and Microsoft Access. These five applications are among the most used in the computing world, and the ability to link them is itself remarkable. I am told that Microsoft Project is VBA-accessible.

In addition, one can link Visual Basic for Applications to Visual Basic the standalone language. With certain exceptions, Visual Basic programs can make use of the same VBA technology to control Word, Excel and the other applications as they can use among themselves. This means that you can assemble your own superapp out of remarkable components. Need word-processing or desktop publishing? Include Word. Need a lot of financial calculation? Add Excel. Want a heavy-duty database in your project? Access to the rescue. The amount of power included in this "core" VBA-compliant group is sufficient to most tasks for the small business. So far, the online products Outlook (which has an email component) and Internet Explorer

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respond only to the VBScript subset, but I would expect that deficiency to be remedied soon.

The third-party products which have licensed VBA are impressive and competent. AutoCAD has licensed the technology. So have Texas Instruments and Symantec. Great Plains Software makes financial software and is onboard; so is Visio, which makes drawing and diagramming programs. More are sure to follow, as Microsoft continues to extend its market dominance.

Ease Of Use

So VBA is very powerful and wide-ranging. What is the bad news?

How can I say this tactfully?

Well, it is agonizingly difficult to use. Was that tactful enough?

"How can you say," someone might respond, "that Visual Basic is the easiest way to program for Windows, and yet that VBA is agonizingly difficult? Riddle me that!"

The fact that you can record a macro, and then (when you edit it) discover that it has been recorded as VBA code is the easiest thing about VBA. From then on, it just gets harder.

The problem is the shadow side of VBA's power. Objects are the hybrids of data and procedure of which all current programs are composed. Visual Basic for Applications is so effective because it "exposes" the objects that actually make applications run. But having objects exposed is like having the workings of a sausage factory exposed—you quickly regret knowing.

For instance, I began my "Shakespearean Insult Generator" with a rough plan: First I would open the Excel application. Then I would choose the components at random, and compose my insults. Finally I would write them into the Word document. I am a Visual Basic hobbyist. My wife actually uses a weaving design program I wrote using VB. No problem, I thought, and allotted an evening to write the insult generator.

It turned out that the last two parts of the problem were easy. It was simple to write a little program fragment to make up a random string from the components. And it was not that difficult to find out how to write that string into

AppleScript: A Reader Responds

I want to add one bit of information to Birrell Walsh's AppleScript column. There's a product called FaceSpan that adds a great deal to AppleScript's usefulness. It's a Visual Basic-like application development tool for the Mac that is based on AppleScript, and it's a must for the serious AppleScripter. The manufacturer is Digital Technology International, and the Web site is at *http://www.facespan.com/core.html*.

Bruce McLaughlin
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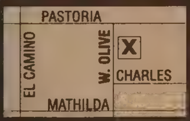

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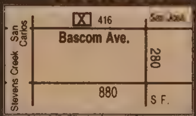

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Small Office/Home Office *continued...*

Visual Basic, in part because I had the helpful *Visual Basic For Applicatons In 21 Days.* But I was simply not able to find out how to get to the data from the Excel program into Word. I kept scouting through the example programs in *21 Days* and the Microsoft documentation, looking for something similar to my task.

The fundamental problem is that everything in these Microsoft programs is handled by objects, and objects are hidden within other objects. In which of the 500+ objects to which VBA has access would I find the function I needed? I sought in vain in Microsoft's object-map pamphlet. I tried wandering around in the object browser, not discovering what I needed. It was only by accident that I finally unearthed a "method" (object jargon for a procedure) that would do the job. It was buried in an example attached to a "see also" page in the online help file.

What I wanted, and have not yet found, is a truly intelligent help system for VBA—one into which I could type "get Excel cell contents" and receive some useful responses. Microsoft's current Wizards look helpful, but they do not have much ingenuity. It was for lack of such help-files that what I thought would be a one-evening project became a three-week project. And it didn't have to. After all, these are the folks who designed the whole operating system. Microsoft might have made a help system that could have walked you to any function you wanted. Instead, it just makes very vague and random guesses, and has yet to land me at a useful function.

Nevertheless, VBA is extremely powerful and worth learning if you need to automate projects. In the words of Bill Gates in that 1987 article: "The ability to combine the power of routines from multiple applications is a significant opportunity worth pursuing." You can hide your VBA code from end users, so you can become a private software developer. VBA, for all the grief of finding appropriate methods to do the job, is worth the exasperation to people who need its power. It is not for the casual user or for the hobbyist. That is a shame—it could have been for everyone, if a decent help system had made it more accessible. ■

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RESOURCES:

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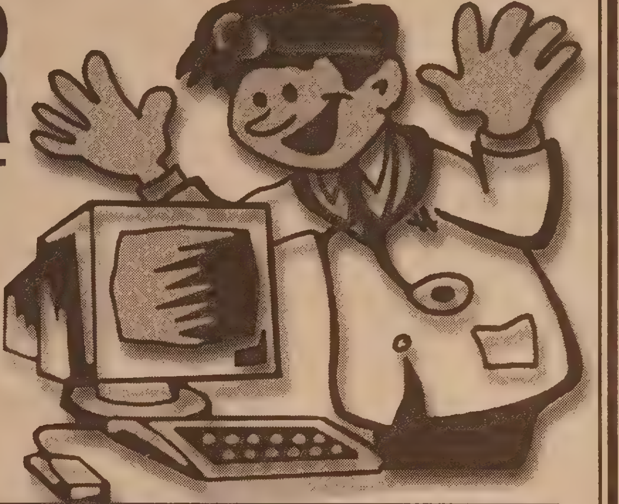

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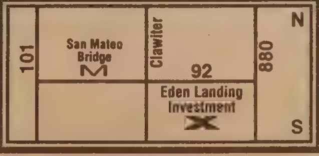

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Tax Cases Befuddle Software Workers

Mixed Signals From The Courts Induce Uncertainty

Two recent tax decisions brought confusion to software developers and computer industry professionals.

One decision illustrates some of the obstacles and challenges you might encounter if you claim R&D tax credits for software developed for your business' in-house use. Based on legal grounds some observers find questionable, software development costs were denied to United Stationers.

The other deals with independent contractor agreements. Bowing to big industry pressure, the Ninth Circuit Court of Appeals reheard *Vizcaino vs. Microsoft*, a mold-shattering case about whether computer professionals who sign up as independent contractors can, under certain conditions, claim employee fringe benefits. The new decision, filed in July, is somewhat less favorable to contract techies than the first.

Tax Credits Denied

United Stationers, based in Chicago, is the nation's largest independent office products wholesaler. After a period of rapid growth, but with continuing problems serving its customers, the company decided to update computerization of many of its operations. It developed seven different software programs to manage and retrieve documents and customer data, handle bookkeeping and order tasks, analyze market data, control inventory, and automate shipping.

The software was developed at considerable financial risk to the taxpayer—United Stationers—ultimately costing many hundreds of thousands of dollars.

United Stationers claimed a $156,457 R&D tax credit for the cost of developing these systems. The IRS disallowed it. United Stationers sued and lost. The case was heard by the federal magistrate in Chicago. The federal magistrate failed to find the software innovative.

The case focused on the requirements for internal-use software to qualify for the R&D tax credit. Among the conditions for any research to be eligible for credit, such research must be undertaken to discover information that is technological in nature; the research must be useful in the development of some business tool which is new or improved; and substantially all of the research activity must be part of an experimental process.

The court noted that there is very little case law even mentioning eligibility of internal-use software development costs for the credit, and then went on to find United Stationers software development was not technological in nature. The magistrate opined, "This court finds that merely adding a new program to a computer so that it becomes a more efficient tool for a particular business does not amount to a development which is technological in nature."

Nor did the court believe the software was developed through the process of experimentation. The magistrate reasoned that experimentation requires testing a hypothesis, but failed to see any hypotheses presented in the software development. Moreover, the court found that the software merely utilized already established technology, rather than developing a new realm of computer science.

The court's decision was based on what some consider a questionable reading of the legislative history of the R&D credit (see Resources). In 1986, Congress explained that internal-use software meets the technological characteristics for claiming the R&D credit if the taxpayer can show:

(1) it is innovative (as where the software results in a reduction in cost, or improvement in speed, that is substantial and economically significant);

(2) the development involves economic risk; and

(3) the software is not already commercially available.

The magistrate said that since there was no uncertainty that a computer could perform bookkeeping functions, it was not experimental. However, Congress said that the relevant question to ask is whether the development effort is risky because the ultimate cost is unpredictable—which is a different standard than whether or not the intended functionality can

> **Bowing to big industry pressure,** the Ninth Circuit Court of Appeals reheard ***Vizcaino vs. Microsoft,*** a mold-shattering case about whether computer professionals who sign up as independent contractors can, **under certain conditions, claim employee fringe benefits.**

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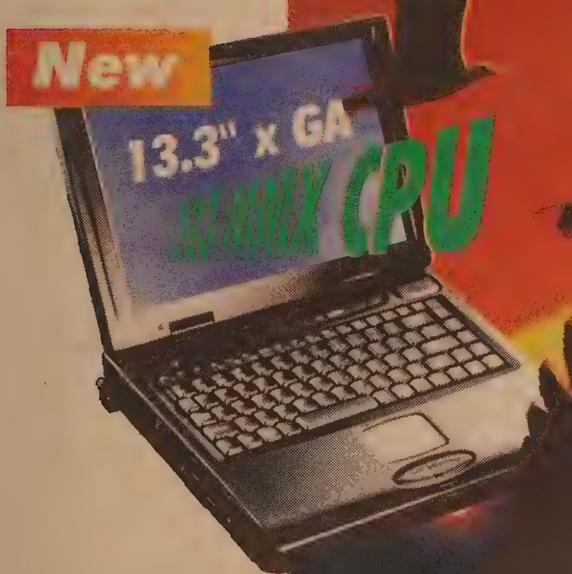

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be obtained from existing technology. The court apparently misconstrued Congress' intent in applying its standard.

The court found that the software programs were not innovative, pointing out that they did not create a revolutionary new way to organize business, such that the efficiency or productivity of the market would be greatly affected. Here again, the magistrate seemed to misread Congress' intent. The legislative history shows that the test for in-house software being innovative is whether or not it results in a reduction in cost, or improvement in speed, that is substantial and economically significant. One critic observed:

"The magistrate agreed, however, that the taxpayer's efficiency and revenues had increased. This would seem to reflect that the software—which was not commercially available—was innovative in improving the efficiency in delivery of the taxpayer's goods."

According to the magistrate, to be innovative, the software must provide both a substantial improvement in speed, and an economically significant reduction in cost. But the legislative history clearly states that the taxpayer need only show one or the other.

> In essence, the court granted Microsoft one last chance to mend its ways. At first blush, that might seem like a win for exploited techies. ***Victory, however, is not quite clear.***

Although this case doesn't seem like great news for anyone but the IRS, neither is it as bad as it looks. The decision has not been reviewed by the Court of Appeals, so the magistrate's findings carry little weight. Even if upheld on appeal, the fact that Illinois is in the Seventh Circuit decision means it is not binding on courts in the Ninth Circuit, home of California and Washington.

Exploitation Of Marginal Workforce

In *Vizcaino vs. Microsoft,* a group of programmers and technical workers who had signed independent contractor agreements sued Microsoft. They sought fringe benefits under Microsoft's pension and welfare plans, which were available to Microsoft's regular employees. The lower court threw the case out before trial because independent contractors aren't entitled to retirement benefits and other employee perks.

continued on page 80

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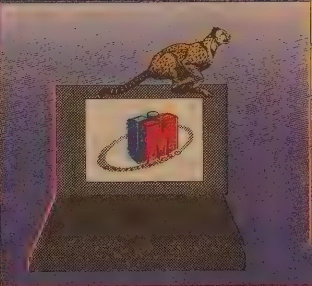

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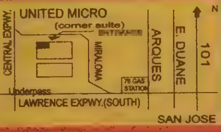

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Accounting

continued from page 76

But the Court of Appeals found Microsoft's so-called independent contractors were more than second-class employees. They were entitled to pension and welfare benefits because they were actually common-law employees who, having been misclassified, were improperly excluded from participation in the benefit plans.

> Microsoft's political clout and industry lobbying may have encouraged the ***granting of a rare, post-appeal, full court rehearing.***

Microsoft's political clout and industry lobbying may have encouraged the granting of a rare, post-appeal, full court rehearing. In this rehearing, the Court of Appeals was less generous to contract techies.

Instead of reversing the district court outright, the matter was left undecided. The case was sent back to the district court to address a narrow procedural requirement. Because the nature of the requirment amounted to a legal technicality, it may be more difficult for other computer industry consultants to understand and pursue their rights.

A mere seven months after contract techies won their happy victory, a piece of it has been taken back. It's easy to see why. Along with Microsoft, the court was pressured by big industry associations including the American Electronics Association, California Chamber of Commerce, and the Association of Private Pensions and Welfare Plans.

In reaching the new decision, the Court of Appeals was no longer faced with the question of whether or not the technical workers who sued Microsoft were common-law employees. Microsoft had virtually conceded the point before the appeal process began. Even though the workers signed agreements stating that they were contractors and not employees eligible for benefits, legally they were common-law employees because they were subject to Microsoft's control over "the manner and means" of accomplishing their job. The independent contractor label was incorrect so the court simply disregarded it.

In *Vizcaino II*, the Court of Appeals mainly focused on one of the benefits, eligibility to participate in an employee retirement plan. The plan restricts benefits to employees who are "on the United States payroll of the employer." The court noted that the plan is separate from Microsoft itself, as legally required. The court then explained that it is the plan administrator, not the courts, who has the initial duty of plan construction. Because of the procedural path the case had taken, the plan administrator had not been called upon to rule on the question of whether or not the workers were on the US payroll.

The court said, "We would set a poor precedent were we to intrude upon that exercise of discretion before [the plan administrator] has even considered and ruled upon the issue." Thus, the matter was sent back to the district court, and in turn back to the plan administrator to rule upon the issue.

The court's comments left little doubt, however, that should the plan administrator rule that the workers were not on the US payroll, the court would overturn the ruling as being arbitrary and capricious, perhaps with harsh consequences to Microsoft. The end result is a slam dunk for those particular workers, pending a procedural formality.

In essence, the court granted Microsoft one last chance to mend its ways. At first blush, that might seem like a win for exploited techies. Victory, however, is not quite clear.

Vizcaino II might also be read as the court encouraging delay tactics by corporations and imposing procedural burdens on workers trying to claim their benefits. In the court's granting Microsoft a second chance, employers might see an opportunity to sandbag workers with ever-shifting theories for denying benefits.

By affirming the worker's rights but making it procedurally more difficult and time-consuming to obtain them, the court adopted what Newt Gingrich might call "a more balanced approach."

A dissenting opinion suggests worse damage yet from *Vizcaino II*: "All agree that those freelancers who were converted into employees of outside employment agencies have no valid claim for participation in the [benefit plans] after the date of their conversion." As discussed in our earlier columns, workers suffer severe tax and business disadvantages in using employment agencies (see reprint box at end of article). No doubt, Vizcaino II will increase the incentive for employers to use agencies instead of hiring technical workers directly.

On the other hand, had Microsoft outright won the rehearing, the workers would have been denied coverage. If that had happened, programmers and technical consultants might find it harder yet to find regular employment with full benefits. ■

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Complimentary Reprints:

Vizcaino vs. Microsoft, No. 94-35770; 1997 U.S. App. LEXIS 18869 (9th Cir. 1997).

United Stationers, Inc. vs. U.S., 1997 U.S. Dist. LEXIS 4299; 97-1 U.S. Tax Cas. (CCH) P50,457; 79 A.F.T.R.2d (P-H) 1761 (1997).

Simon and Cherniss, **"Contract Techies—Tax Implications of Alternative Hiring Arrangements,"** *MicroTimes* (Jan. 1994).

RESOURCES:

Andrew Lee, *"Eligibility of Internal-Use Software for Research Credit Needs Clarification,"*
The Tax Advisor, p. 413 (July 1997)

Conference Report No. 99-841, Vol. II
(Public Law 99-514, Tax Reform Act of 1986),
pp. II-73,74.

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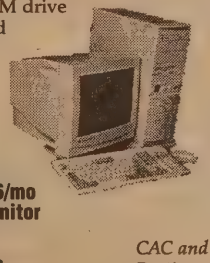

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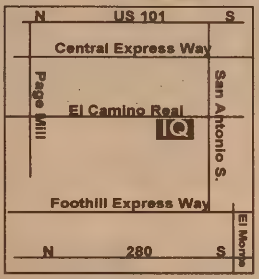

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BY ROYAL P. FARROS

The Making Of An Internet Startup—Part XII

Don't Make Money On The Internet

I was recently asked to speak on an industry panel. The topic was making money on the Internet, which I thought was ironic since no one is making money on the Internet. Nor should they be... yet.

Allow me to explain, with the help of my new favorite cartoon. Imagine a boss sitting in front of an executive staff and pointing to a slightly upticking trend chart: "Great news, everybody! We're out of the fire and back into the frying pan!"

That's the way everyone who's succeeding in e-commerce should feel. No joke. You should feel a nice upward trend, but it should still feel hot as hell.

I'm about the last person anyone would guess would feel this way. Coming onto the Internet scene, I probably was the world's biggest supporter of "boot-strapping," that is, growing a business one small step at a time, reinvesting profits cautiously, all the while building a solid business foundation underneath steady and sure business momentum.

I actually got involved with the Internet because I scoffed, "Geez, people on the Internet must really be dumb if they can't make money." I exclaimed, "iPrint will be the first important Web site to make money on the Internet!"

Boy, was I gazebo.

If you're lucky enough to be generating revenues, prepare to plow each and every dollar back into the business. **The point is not to make money now... the point is to give your business asset value from which future profits can be generated,** either on your own or as part of another entity.

Scale, Scale, Scale

They say timing is everything, and when you combine this with the heightened pace of "Internet time," you realize that being able to scale a company quickly is probably the single most important factor for success on the Internet. Or should I say, it's the thing that separates the IPO candidates from the "they have a nice little business, don't they?" mom & pops.

It takes money to scale. It also takes experience, hard work, and courage. And money... did I say money? It's expensive to build a brand, carve out a strategic position, and set up a solid, growable infrastructure. And these are the activities you need to do *before* breakfast.

Raising The Dough

There are a number of ways to fund a company. If you're lucky enough to be generating revenues, prepare to plow each and every dollar back into the business. The point is not to make money now... the point is to give your business asset value from which future profits can be generated either on your own or as part of another entity.

I'd be remiss if I didn't mention that saving a dollar means not having to raise a dollar. Belt-tightening on things like salaries, travel, and fancy office space and furniture can dramatically reduce your need for capital, but unfortunately only during the development phase of life.

I'm not big on financing a company through credit cards or bank loans, but I'd be hard pressed to refute their value. Like reinvestment and belt-tightening, though, it may creatively get you through the "seed" stages, but it won't get you to the Big Show.

Really Raising The Dough

Inevitably, you're going to need a lot of money to scale. You can go down a venture capital route, the "established" way of raising a great deal of money from professional investors. iPrint is in the process of raising our first round even as I type (which is why this article was delivered late and why my editors are such terrific, patient people!).

What's really popular today is working with "Angel" investors, essentially normal people who feel like they've gone around an investment block or two and who now fancy themselves as mini-venture capitalists. Some of the Angel investors are quite sophisticated. More often than not, though, they're your parents, roommates, or family doctor.

There are pros and cons for raising money both ways. Timing is one of the key determinants. The sophistication of the investor is another. The venture capital process is quite exhaustive. And expensive. (Legal fees alone will run you in the tens of thousands of dollars.) While Angel money is easier to obtain, do you really want to be sitting across the dinner table while your mom is angrily telling you how you've blown it with your latest development schedule slip-up?

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The Making Of An Internet Startup *continued...*

Given this hyper-time Internet world, a lot of companies are heading straight to the public markets for financing. In the past, going public was really a way to achieve liquidity for all the managers and employees who created a profitable and successful business entity. By definition, only profitable companies could go public, which meant that proceeds from a public offering really helped fill the company's war chest.

Leave it to the Internet to turn this age-old concept on its head. Companies are now amassing enormous sums earmarked not for expanding a time-proven business strategy, but rather, for *exploring* and *experimenting* with different business models. Yes—borrowing from the Kinko's tagline—public financing in the late '90s seems to be the "new way to venture capital."

Irresponsible But True

This may seem like one of the most irresponsible articles I've written in the series. Am I advocating that e-businesses should lose a ton of cash in establishing themselves?

Well, yes, I think I am, though I would consider this more "investing" than "losing." Sure, there are exceptions to what I'm saying: A great electronic commerce business is being created right now that will scale through creativity and internally generated funds.

But for the overwhelming majority of e-businesses, we can't wait. The great companies of the new millennium will be built in months and years, not years and decades. Being able to scale your organization is what it's all about. And that takes investment, not profitability.

The great companies of the new millennium will be built in months and years, not years and decades. **Being able to scale your organization is what it's all about.** And that takes investment, not profitability.

When someone said a few years back, "Is it possible that the Internet is under-hyped?" they were spot on. The Internet's profound influence is changing the very nature of the way businesses are built. And given 220 or so years of capitalism, I'd say this is quite a feat. ■

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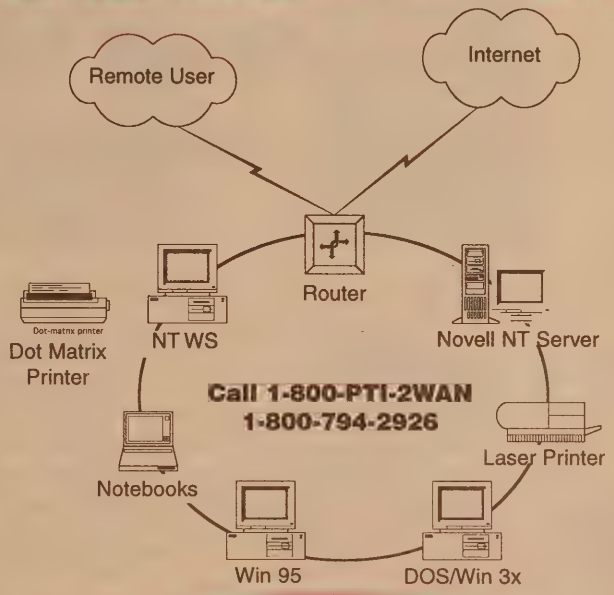

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BY DAVID NOACK

Shell Survival Tips

On The Internet, A Little UNIX Is A Useful Thing

For most people with a small office or home-based business, the Internet has become an integral part of their work, whether they're conducting research on the Web, sending email or documents to a client, or creating a Web page to announce and promote their services.

Nowadays, most people use client programs with Graphical User Interfaces (GUIs); these are applications that make doing work on the Internet as simple and easy as the click of a mouse. Some of the more popular applications are Netscape's Navigator and Microsoft's Internet Explorer, both Web browsers; Qualcomm's Eudora, an email program; Forte's Free Agent, a newsreader, and CuteFTP, a file transfer protocol program.

> It's always good to have a shell account as a backup, just in case your SLIP/PPP connection is down for any reason. **While it may be a little clumsy, a UNIX shell account will allow you to continue to do your work.**

But while you're seeing colorful images and fancy icons, what's hidden from view is the basic infrastructure of the Internet, which is largely UNIX-based.

When you click on a hypertext link in your graphical Web browser, you are automatically (for the most part) taken to a Web page where you have the ability to view an image or listen to sounds. If you were to try the same thing using a popular UNIX text-based browser called Lynx, forget about multimedia capabilities. But what you lose in sights and sounds, you pick up in speed with a text-based browser.

If you're familiar using DOS commands at the C:> prompt, such as md to make a directory, cd to change directories or move to move a file, then learning a little UNIX is not that difficult and may come in handy one day.

Just like DOS, UNIX also presents you with a command prompt, where you type in instructions for the computer—whether on your desk or a remote host—to execute.

Shell Accounts

Prior to 1994, SLIP (Serial In Line Protocol) and PPP (Point-to-Point Protocol) Internet accounts were expensive and rare. Most people got their first taste of the Internet via a UNIX dial-up shell account. For the Web, they used text-based programs such as Lynx. They sent and received mail using Pine, a mail program, and wrote letters and documents using Pico or Vi, popular text editors.

Nowadays, most Internet Service Providers (ISPs) offer SLIP/PPP and shell accounts. Sometimes the ISPs bundle the services and offer one price, while others split the service and you decide what you want to pay for. In any event, it's always good to have a shell account as a backup, just in case your SLIP/PPP connection is down for any reason. While it may be a little clumsy, a UNIX-shell account will allow you to continue to do your work.

To connect to your ISP, you must have a communications program that allows you to dial a telephone number. For a PPP connection, you're probably using Windows 95 TCP/IP winsock or a third party winsock application such as Trumpet Winsock, or a Macintosh implementation of PPP. To access a UNIX shell account, you would dial up your ISP using any basic communications program, much like dialing up a local bulletin board system. Make sure that your terminal emulation is at either VT100 or VT102. Once the modems have squealed their way to an acceptable speed, in most cases you'll be asked for a login name and password.

Once you successfully log in, be prepared to face something like this (depending on the system): % or $.

The percentage and dollar sign symbols indicate what type of shell (interface) is being run on the remote host computer. The main UNIX shells are Bourne, Korn and C. The main purpose of the shell is to provide you with a command prompt, interpret your commands and report errors. The command prompt for both Bourne and Korn shells is a dollar sign. The C shell uses the percentage sign.

A Short Primer

Now that you're facing the command prompt, what next?

Here is a brief primer on how to use some of the more popular UNIX-shell programs. While I

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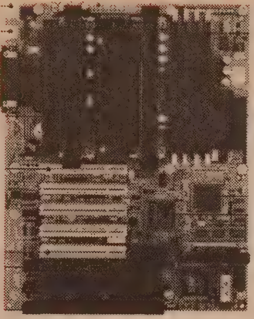

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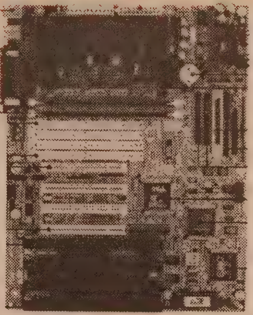

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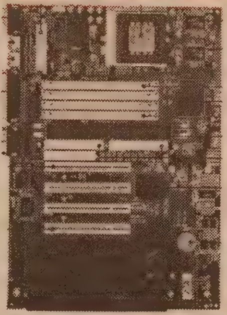

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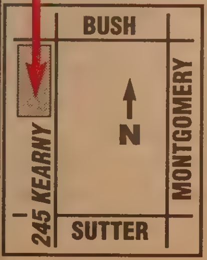

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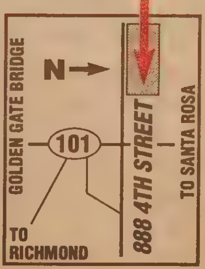

capitalized the names of the client programs below, you don't have to. Typing in the name of the program in lowercase is fine.

Pine: Pine is an email program developed at the University of Washington.

To start Pine, simply type "Pine" at the UNIX prompt and hit enter. A menu will appear, allowing you to compose a letter, create and update your address book, and read your mail.

If you want to write email, at the menu type the letter C to compose a letter. At the To: heading, write the recipient's email address. You can also send a Carbon Copy (cc) to another person by typing in their email address on that line.

Once the header information is completed, you can then proceed to write your message. When finished, press the CTRL (control) key and hit the letter X. At this point, you'll be asked whether you want to send the letter. Press Y, and it's on its way.

To read your mail, at the main menu hit the letter I (Index) and a listing of your mail will appear in numerical order. The lower the number, the older the mail. You can use your arrow keys to move down each line or hit the space bar to go from page to page. To quit Pine, hit the letter Q; you'll be asked whether you really want to leave, so answer Y to exit.

Pico: This is a simple text-editor program. At the UNIX prompt, just type "Pico" and hit enter. A blank screen will appear with the cursor blinking at the top left-hand side of the monitor.

You can start your letter where the cursor is blinking, or move the cursor down a bit, then begin to write your letter. Once done, you can save the letter. To save, hold down the CTRL (control) and press the letter X. You will get a message that reads: "Save modified buffer." You'll be prompted for a yes or no answer; press Y to answer yes. Next you have to give your letter a name. When you're prompted for a file name, give the file a name of your choice (since this is UNIX, the name doesn't have to be the usual eight dot three or routine letter.txt).

After you write and file your letter, there's a good chance that you'll want to get it back at some point. Once again, type "Pico" at the UNIX prompt and a blank screen will reappear. To retrieve your file, hold down the CTRL (control) key and the letter R. Here you will be prompted for the file name. If you know it, type it in and hit enter and your file should reappear. If you don't remember it, CTRL-R followed by CTRL-T will take you to other directories and files in your home directory. Use your tab key or the up and down keys to highlight the file and hit enter. The file will appear. To exit Pico, hold down the CTRL key and press the letter X.

Here's a shortcut to get a letter or document in Pico. At the UNIX prompt, type Pico followed by the name of the file. It looks like this:

pico letter.txt

Lynx: This Web browser was created at the University of Kansas and was originally planned to be the main feature of a campus-wide information system. The first version of Lynx debuted in 1992. The following year, Lynx was turned into a Web browser that highlights hypertext links.

I have a shell account with an ISP in Boston. I happen to live in New York. If I were to use the telephone to dial direct to my ISP, I would soon go broke. What I do is Telnet to my ISP; **I can do everything as if I had actually dialed in.**

You can start Lynx by typing Lynx at the command prompt. On most systems, a default home page will appear. If you want to go elsewhere, you'll have to type the letter G, and at the bottom of the screen you'll be prompted to type in a new URL (Uniform Resource Locator or Internet address). At this point, you'll be prompted with a command that reads: URL to Open. Simply type in the name of a Web site you would like to visit. For example, type in *http://www.yahoo.com* , which is the Web address for the popular indexing service called Yahoo!

You can move the cursor around in Lynx two ways: using the tab key to move the cursor from left to right, and the arrow keys, which will move up and down and also left and right. When using Lynx it's important to have your terminal emulation set at VT100 or VT102; if you don't, the screen will look really weird and it will be very difficult to use. To quit Lynx, just hit Q and you'll be prompted whether you want to quit, then press Y.

Tin: This is a powerful and easy-to-use Usenet Newsgroup newsreader. To start Tin, type Tin at the command prompt. You will typically see a series of messages such as "Reading news active file," "Reading attributes file" and "Reading newsgroup file" when you first start the program.

Once that's done, a list of newsgroups will appear on the screen. There are 20,000-plus newsgroups. Your ISP may carry all of them or some of them. In order to see all the newsgroups your ISP does carry, type Y and press enter to "Yank" in all of the newsgroups. In order to go to a specific newsgroup, press the letter G and then enter the name of the newsgroup, such as *alt.journalism* or *comp.virus* , and then hit the enter key.

If you want to search for a particular newsgroup, press the / key and enter a keyword such as "software," "media," or "Mets," and hit enter. The search will retrieve every newsgroup containing that particular word. When you find the newsgroup that seems right (it will be highlighted), just hit enter. To quit, hit the Q key.

Telnet: This program allows you to operate a remote computer, just as if you are sitting in front of that computer. At the UNIX prompt, type Telnet followed by an Internet address. It can be either an IP address, which is a series of numbers or a domain name, which is the name of the remote site.

I'll use myself as an example.

I have a shell account with an ISP in Boston. I happen to live in New York. If I were to use the telephone to dial direct to my ISP, I would soon go broke. What I do is Telnet to my ISP; I can do everything as if I had actually dialed in.

At the UNIX prompt, I type Telnet and hit enter. At the next prompt I type in the word open and hit enter. I then type in the domain name of my ISP—*world.std.com* . Once I type the address

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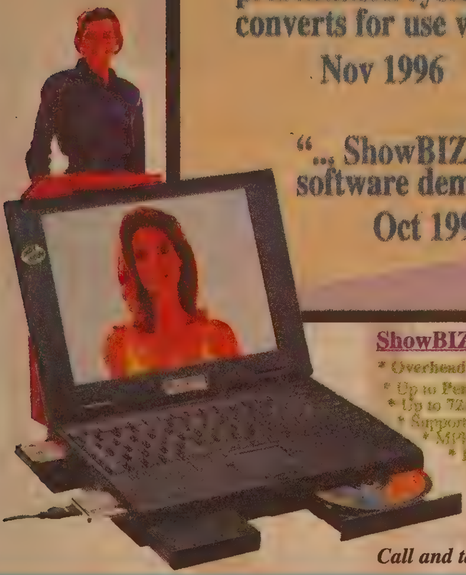

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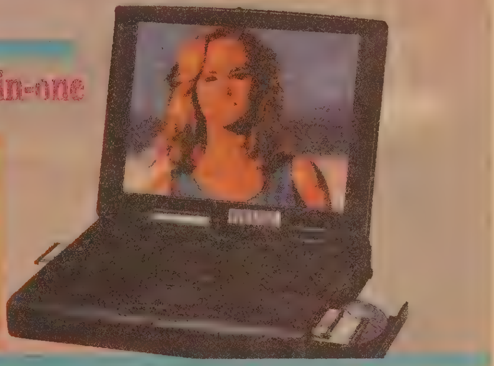

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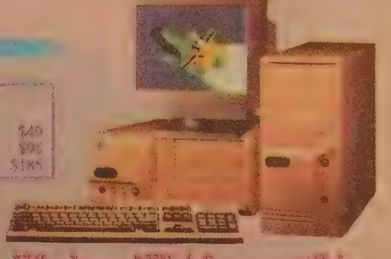

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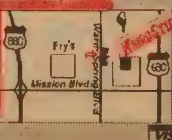

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Shell Survival Tips *continued...*

and connect to the system, I'm asked for my login name and password. When I want to close my session, I type exit. Some systems also accept logoff and quit.

Gopher: Gopher was developed at the University of Minnesota where the sports teams are called the "Golden Gophers." Gopher is a distributed document delivery system, which presents information in a hierarchical fashion.

Let's say that you want to get to another site using Gopher. At the UNIX prompt, type Gopher and the name of the site you wish to visit. In this case, you can type Gopher marvel.loc.gov , which is the Library of Congress gopher server. At this point, you'll see a menu which includes a listing "About LC Marvel to Search LC Marvel menus."

You can get to any of these menu items by either typing in the corresponding number or using the arrow key to move the cursor up and down. Whichever way you use to get to a menu item, don't forget to hit enter. To quit Gopher, hit Q; you'll be prompted for confirmation—just hit Y for yes.

> Gopher was developed at the University of Minnesota where the sports teams are called the "Golden Gophers." **Gopher is a distributed document delivery system, which presents information in a hierarchical fashion.**

Anonymous FTP: This is a way to get a file that's on another computer to your computer—kind of. Using a UNIX shell account makes getting a file on your hard drive a two-step process. First, you have to download the computer to the remote UNIX host (your ISP) and from there to your computer.

At the UNIX prompt, type ftp and hit enter; that will give you an FTP prompt. Next to that ftp> prompt, type open. That will then give you another prompt (go)—type in the address of the FTP site you want to go to and hit enter.

When you connect to an FTP site, you'll be asked to log in; since this is anonymous FTP, type in anonymous. You'll then be prompted for your password, but since you don't have one for this system, use your email address.

To download a file, type get followed by the *exact* name of the file, and hit enter. The file will then be transferred to your ISP. To quit, type bye. From that point, download the file from the ISP by whichever method you normally use to download a file from, say, a local bulletin board system.

Being prepared and learning a little UNIX can save you a lot of time and headaches later on. ■

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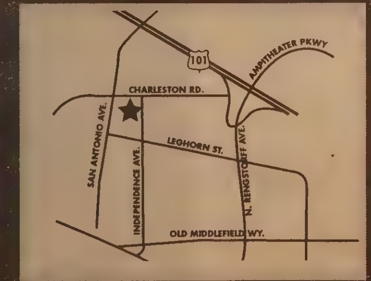

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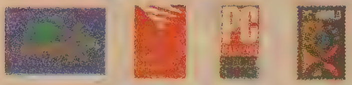

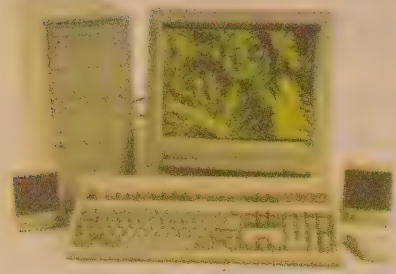

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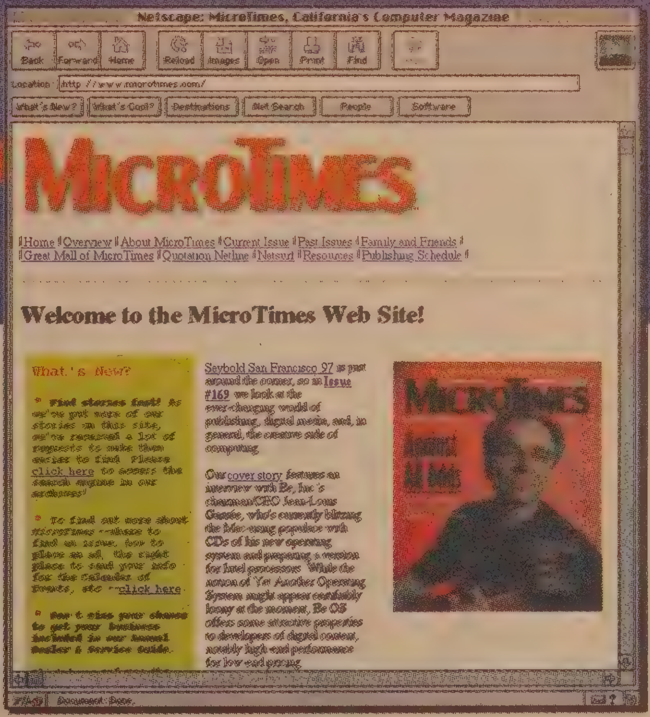

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Seybold San Francisco 97 is just around the corner, so in Issue #169 we look at the ever-changing world of publishing, digital media, and, in general, the creative side of computing.

Our cover story features an interview with Be, Inc.'s chairman/CEO Jean-Louis Gassée, who's currently blitzing the Mac-using populace with CDs of his new operating system and preparing a version for Intel processors. While the notion of Yet Another Operating System might appear certifiably loony at the moment, Be OS offers some attractive properties to developers of digital content, notably high-end performance for low-end pricing.

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AGAINST ALL ODDS

JEAN-LOUIS GASSÉE ON THE IMPROBABLE RIGHTNESS OF BE-ING

BY MARY EISENHART PHOTOS: TUSTIN ELLISON

AS YOU STEP FROM THE ELEVATOR TO THE UNINHABITED RECEPTION AREA OF BE, INC. (*http://www.be.com*), a handwritten note instructs you to turn left and look for Sylvie. Wending your way through a chaos of cubes and cables, you find a wall of newspaper articles about the company, in several languages; a quote from Maeterlinck to the general effect that the guy with the world-changing idea is invariably impeded by clueless hordes protecting the past; and a *Star Trek* poster announcing that resistance is *not* futile, assimilation *not* inevitable. ✻ This last, says CEO Jean-Louis Gassée, after Sylvie has tracked him down as promised, dates from the period last year when Apple was considering the relative merits of Be and NeXT as acquisitions. Left unstated is who's cast as the Borg in this movie. ✻ In the wake of events at Macworld Boston last month, symbolized in numerous venues by a huge video image of Bill Gates looming over Steve Jobs at the fateful keynote, the question is on numerous minds. While commentators had a field day with hyperbolic metaphor (by the end of the conference, the popular T-shirts portraying Bill Gates in full Borg array had been supplemented by one showing Steve Jobs in the same guise) comparing the dramatis personae to the Nazis, the Antichrist, and other Usual Suspects, developers, analysts, and hapless computer users tried to figure out what was going on and what the implications for their particular job might be. ✻ With the desktop market virtually conceded to Microsoft and the New Apple focusing on its historic strengths in education and media authoring; with the entire future of Mac clones in doubt, with Apple taking over PowerComputing; with developers and users alike scratching their heads over the long-term prognosis of Apple Computer, body and soul—could this possibly be the moment for a new operating system? ✻ BeOS, for example? ✻ Be, which Gassée founded in October 1990 not long after being palace-couped at Apple, was very hush-hush about its activities for five years, and in 1995 first demoed the Be Box, a dual-processor Power PC system that ran a new operating system. While the system's performance and ease of use were stellar, the future of Yet Another Platform was questionable at best. ✻ In the ensuing years, the Be Box itself disappeared and the company reinvented itself as software-only, and before it shipped its first product it acquired nicknames like “The Next Amiga” and

continued on page 100

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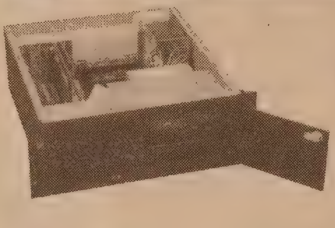

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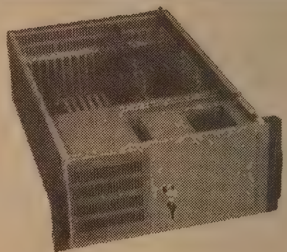

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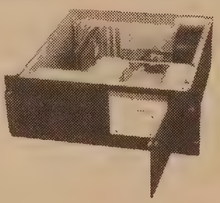

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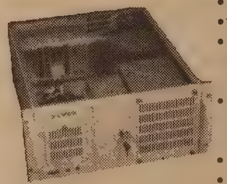

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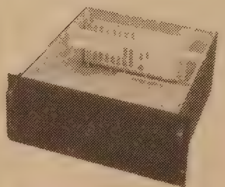

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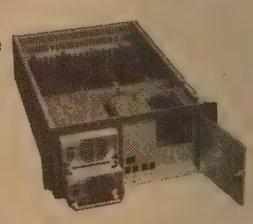

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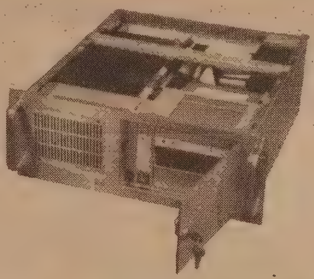

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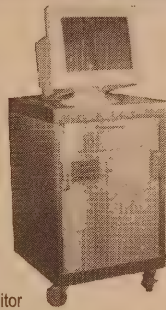

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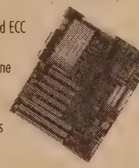

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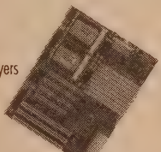

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- RAID-5 and SFF III ready.
- Pentium Pro 200. 64MB memory upgradable to 256MB.
- 8 Gigabyte Wide SCSI drive.
- ECS motherboard P6F x 1-A inside.
- Novell Tested and Approved.

In addition to the above, the rack-mountable RMNT_FX1a system includes several state-of-the art features as well. It utilizes the intel 440FX* PCI set chipset as its core logic, a 1MB Award Flash BIOS with support for PnP 1.0A,APM 1.2, Multiboot and DMI, one EPP/ECP mode parallel port, two 16550 high speed serial I/O port, and built-in USB headers for future upgrades.

Chassis
- Rack Mount (ATX Platform)
- 16.813″ x 18.88″ x 6.75″ (W xD x H)
- Five 3.5″ drive bays (one exposed)
- One 5.25″ drive bay (exposed)

Certifications
- FCC Class B for the system
- Novell 4.1, with approved options

Warranty
- Two-year parts and labor standard
- Optional on-site warranty available

Options
- Video monitor 14, 15 or 17″ Mounting Rack
- Choice of Novell Intranetware 4.11, 3.xx or Windows NT
- Webserver (for Intanetware) option
- Tape drive

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Your One-Stop Source for Industrial Computer Needs

continued from page 97

"OS/2 For Mac." When Apple decided to acquire NeXT instead of Be for its future operating system technology, Be's future seemed, if possible, even less promising than Apple's, its continued existence due largely to its founder's hubris.

Macworld Boston marked the first public release of the Be OS, which is currently being inserted to the tune of a million CD-ROMs in Mac magazines worldwide. Since July, it's been shipping with Mac clones from Power, UMAX, and Motorola, and will soon be downloadable from Be's Web site.

In Boston, the same afternoon as the Apple keynote, interested techies watched Gassée and a number of third-party developers put the OS and their applications through their paces—achieving, on a relatively inexpensive dual-processor UMAX box, speed and effects most recently seen with a much higher price tag at Silicon Graphics, combined with ease of development probably not seen anywhere. For the first time, the company also demoed the Be OS running on Intel processors.

The next week, amid the splendid startup funk of Be's offices ("Those couches cost 20 bucks apiece and they're worth every penny!" says Gassée), hubris is not much in evidence, though there's still a goodly amount of *joie de vivre*. The former Flamboyant Frenchman now wears standard nerd-issue T-shirt and khakis, and comes across more as the engineer he is than the showman he once was.

And in this context, he explains why, after all these years and against all these odds, it might actually be viable to sell Yet Another Operating System at the very moment the OS wars seem to be over.

* * * * *

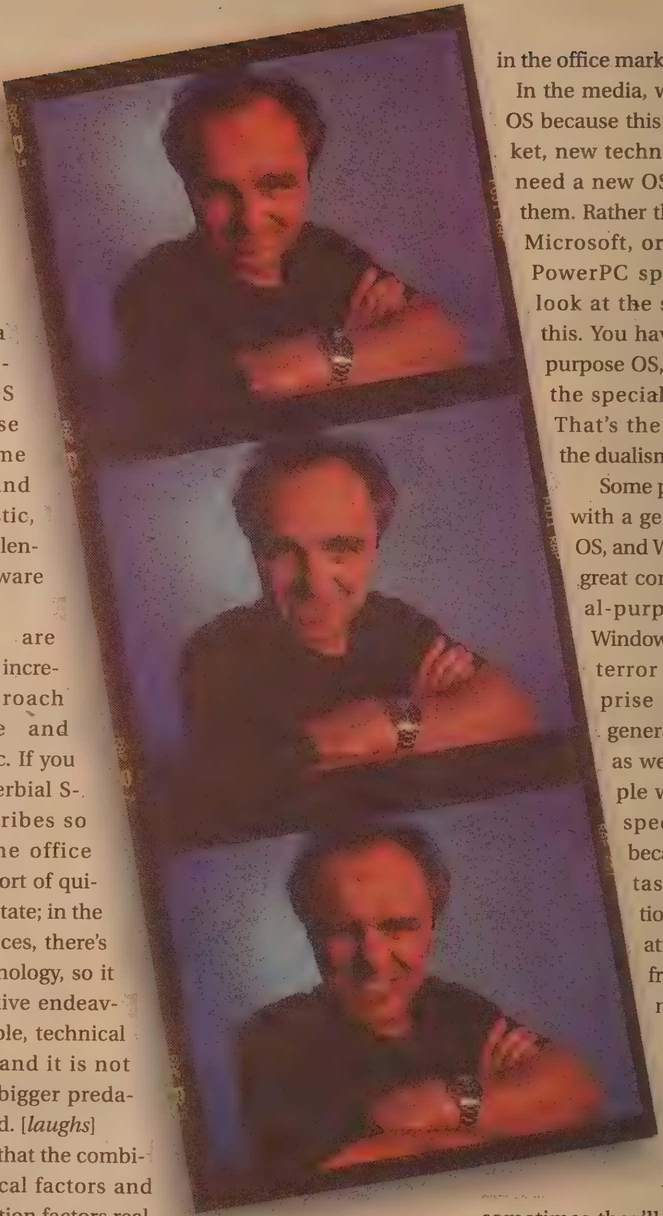
The conventional wisdom is that you're crazy—that the world does not need another operating system, etc. After seeing your presentation in Boston, I think conventional wisdom might be wrong, so I'd like you to explain why this might not be as crazy as it looks.

Thank you!

But first, you have to be crazy to do anything that is not incremental these days, that is not derivative. I understand why people ask the question—I think it's legitimate.

What we do stems from our observations of the OS world. As you know, I lived inside one of these sausage factories, and when you see it you become convinced that over time OS engines become bigger and bigger, fragile, bloated, slow, they have more and more trouble incorporating new technology.

The good news is that over time they accrue a big legacy of applications, a very rich environment. There are a lot of virtues to the incremental approach—I like it, I use it. I use a Mac; I use a Windows NT system; I use BeOS systems; I use Linux—in some ways I'm OS- and hardware-agnostic, because there's plenty of good hardware and software.



Now, there are places where the incremental approach becomes more and more problematic. If you look at the proverbial S-curve that describes so many things, the office market is in the sort of quiescent maturing state; in the digital media spaces, there's a lot of new technology, so it is rich with creative endeavors, creative people, technical opportunities—and it is not dominated by a bigger predator, name withheld. [*laughs*]

So we thought that the combination of technical factors and market or application factors really made for an opportunity—being what we sometimes call the Media OS. Or at least a specialized digital media OS.

Then you get into "Well, are you trying to displace—Microsoft, for instance?" Well, no, we're not *that* crazy.

What we don't see in the Mac world, but what you see in the other 95% of the market—in the other 95% of the market, people are used to a genre called a boot loader, or a boot manager. Meaning they are used to seeing more than one OS on their hard disk. I'm talking about the more creative and technically inclined, not the office market—an important market, but we have no place in it.

It's fine the way it is.

Yeah, it's fine the way it is, and in that space, people are right who say, "Who needs a new OS in the office market?" I agree!

In the media, we need a new OS because this is a new market, new technology, and we need a new OS to approach them. Rather than displacing Microsoft, or Apple in the PowerPC space, I would look at the situation like this. You have the general purpose OS, and you have the special purpose OS. That's the dialectics or the dualism you have.

Some people will stay with a general purpose OS, and Windows 95 is a great consumer general-purpose OS; Windows NT is a holy terror in the enterprise market as a general purpose OS as well. Some people will go for the specialized OS because they have tasks, applications, media creation, that profit from new technology.

And actually some people will use both. Sometimes they'll use this one, and sometimes they'll use that one. That's our place under the sun.

I'd like to clarify the fact that we are not trying to be a new OS in the displacing sense, but trying to be a new OS in the specialized media sense, as a complement, as opposed to a replacement.

Where do you see yourselves with regard to somebody like Silicon Graphics?

Well, someone who invested in the company, actually, teased me by saying, "Oh, I know who you are, you're the poor man's SGI."

Worse things could happen.

Isn't that *terrible*.

I love it, because SGI has had terrible trouble scaling down. One thing you observe in computing is that things rarely scale down. They often scale up.

In the early electronic publishing days, when the Gang Of Four—Aldus, Adobe, Apple and Canon—created what some people called personal electronic publishing, alias DTP, the guys at the top, the specialized professional guys at the top said, Atex and Scitex said, "*Sniff!* you don't have..."—in other words a long list of what the new interlopers didn't have. But they were addressing the personal electronic publishing, not the professional layer.

Right—the LaserWriter was not for the *New York Times*.

Exactly. The guys at the top could not scale down, but the guys at the bottom did scale up. And they Pac-Maned their way up to the top, so that now—I know a modern newspaper that's entirely done on an Ethernet network. You have Macs and PCs connected to the Ethernet; you have PostScript printers of various capabilities; up to the flash plates, which are done on a PostScript printer, and off you go. You have the newspaper produced, on PCs and PostScript printers, and Scitex and Atex are no longer much of a force in that space.

> "Are you trying to displace—Microsoft, for instance?" Well, no, we're not *that* crazy.

And it's getting done more cost-effectively than the old systems.

Right.

So in the audiovisual computing space (which is another way to see the digital media space, because really it ends up being sensory to human beings), with new technology, such as DVD, MPEG streams off cable or satellite dishes, AC3 Dolby, the home theater stuff, people will want to manipulate these media for creative and production purposes. This is the kind of space where we have something to bring. That's why being called the poor man's Silicon Graphics is such a pleasure.

What you saw last week at Macworld were the first independent applications in that space. There was rödesign (*http://www.rodesign.com*) with a beautiful image editing package; Purity (*http://www.purity.com*) with a very audiovisually gifted Web server; a video editor from Adamation (*http://www.adamation.com*). You had this European guy with a digital sound editor called Dual Player (*http://www.be.com/beware/Audio.html#DualPlayer*). You had TrueSpectra (*http://www.truespectra.com*) with another image editing package.

You had BeatWare (*http://www.beatware.com*) with their whole suite of applications, which are not *apparently* in the digital media space—but then, when you see that you can take a very long document, a 100-page document, and update in real time, manipulate images, that's still in sort of our kind of space. Because one thing we do, because of the properties of our product on other people's hardware, is that we add one letter to the end of WYSIWYG—N. For Now. Or if you will, real-time WYSIWYG. In the production side as in the creative process, the hourglass icon is no good.

And having a multiprocessor, multithreaded, nicely bolted-together set of features in that space makes the product always available to you, so you don't get stuck. Your flow of thoughts is not disturbed in a sort of irritating way.

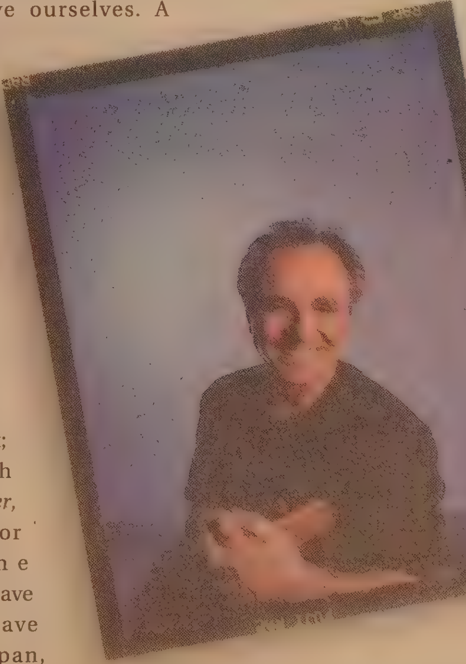
These guys began to make our point about what we bring to the media creation space with our OS. It was a good week.

Do they have demo versions of it on the preview CD?

Some do, some don't, some are already on sale at the booth, some will be on sale.

This is just the beginning—I'd like to deflate any potential for me to make lofty claims. We still have a lot to do and a lot to prove.

We have to prove ourselves. A nascent OS raises all the questions, as you did in the beginning. That's fair. In order to prove ourselves, what we've decided to do is to sort of broadcast our OS—in-the-box agreements with Power Computing, Motorola and UMAX, covering that side of the market; magazine bundles with our friends at *MacUser*, now *Macuserworld* or whatever—the September issue will have the BeOS. You have *MacPower* in Japan, *MACup* in Germany, *UniversMac* in France, *MacUser UK*. In a few weeks we'll have the BeOS also available for download from the Web.



The goal is to have at least a million copies in the field, a small percentage of which will actually be used. We understand the rules there. But this is very inexpensive for us to do, so that we create the virtual circle for our developers. More seats, more applications; more applications create more customers; more customers, more applications, and so on.

Developers, the third and most important part of our business model, have a very nice opportunity. Because yes, we are an unproven OS, and we use the Web as a marketing/distribution/transaction/delivery/update/verification/certification registration model, so they can do all their business on the Web.

So instead of bribing the catalogues, the wholesalers and the retailers to carry their product, they don't have to do any of that. All you need when you're a BeOS programmer is sweat equity. So if you're a midnight programmer, you write a very nice Internet client; next year you sell 50,000 of these at twenty bucks each, that's a million dollars gross receipts. That's not so bad.

The Web being such a friction-free marketing space, you don't lose much of that. The gross and the net, to you as a software developer, are pretty close.

We have a software partner, StarCode. If you don't want to do this as a developer, there's the BeDepot (*http://www.bedepot.com*), where they provide a very slick download. You can pull the plug when you're in a download, shut down the machine, and when you restart the download you restart when you left. It's a very secure download; there's registration, automatic or semi-automatic updates—it's lovely, and a full solution for the software developer who doesn't want to do this directly with the customer. You put your software up at the BeDepot and you wait for the checks.

Of course the BeDepot will collect a royalty. I want them to be rich too. Because our job is to create conditions for third parties to be successful. Without that

continued on page 104

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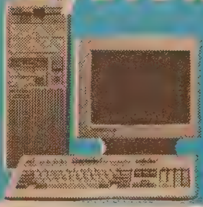

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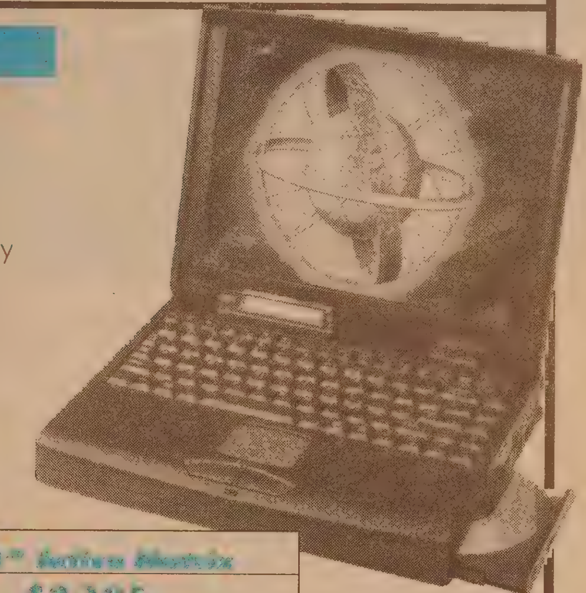

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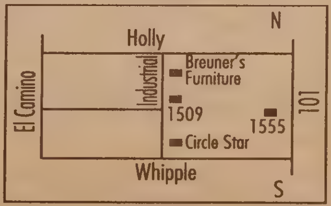


we are nothing. That's why I'm saying I'm very optimistic, and I'm also keenly aware that we have much to do and much to prove.

And lastly, last week was also a good week because we had our Developers' Conference; we had the Master's Awards with over 100 submissions. People wrote all sorts of crazy interesting code, some of which is of commercial value and some not, but that's fine.

But fun.

Yeah. You need fun, because fun will attract more people, and that's how the mayonnaise takes, as it were.

And we demonstrated publicly for the first time the Intel version of our product.

Which will ship when?

Well, mmm... [*makes tortured face*]—I'm always nervous when it comes to software schedules. I assume we'll be able to have it in developers' hands in a couple of months, and in another couple of months, say around the first of the year '98, will be an actual shipment. What I envision is a single CD with the Intel and the PowerPC version, which hasn't been done yet in the PC business. We'll be then covering a potentially nice fraction of the desktops.

> What we try to do is focus on the geek community—by this I mean the more technically aggressive, more creative part of the marketplace—and see what they do. Then, as you say in American, we'll jump ahead of the parade. Or as we say in French, we'll fly to victory's rescue.

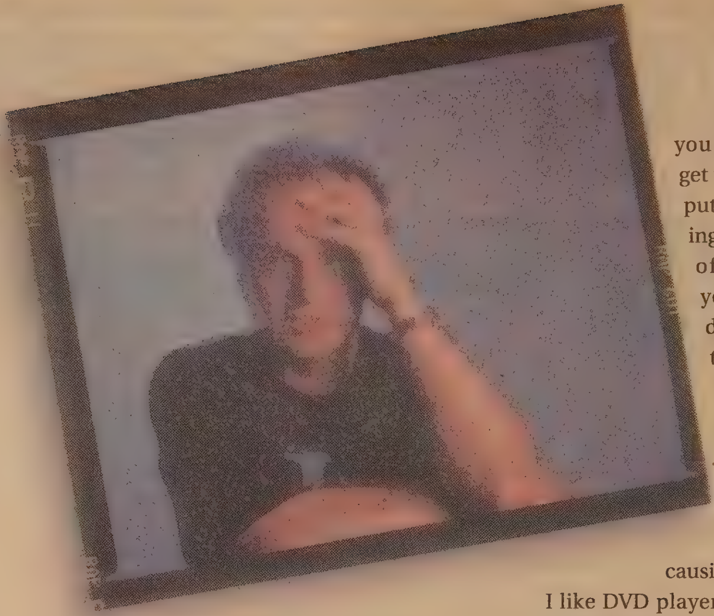
So the main applications you see in this generation are authoring tools?

In this generation. Also games—when you have a gifted platform for multimedia, games happen. They do. There is no serious computer without games. If you don't have games on your computer, it's a bad sign, because there is something missing in there, it doesn't attract the right stuff.

There's something missing in your relationship with the computer?

Well, or the relationship of your technology of your computer with the independent software authors.

So I see games. Also I see opportunities for us in various emerging embedded applications, because we have an extremely small-footprint OS that people like to see, as either the basis of a Network Computer, or to rev OpenGL. Unlike older platforms we love, you don't need Open GL on a Network Computer. A small core with a small browser, and you'd have a very neat package.



There's a living-room space where we see emerging multimedia—entertainment delivery boxes in the living room.

Settop boxes?

Well, "settop boxes" implies something which is pretty ugly and cheap.

Ugly, cheap, and passive.

Passive, and also paid for by someone else, so as a user you feel no involvement.

It's more like a DVD player mating with a game console mating with some kind of a cable modem and sitting on top of your TV—entertainment delivery.

So it's part of this "convergence" thing.

It's part of this "convergence" thing, and I must confess I was skeptical five years ago. But in five years Moore's Law has done three turns, and computers are becoming immensely more powerful and cheaper at the same time.

Now you can afford a consumer media engine, and that's where our software on top of the hardware perhaps is attractive.

The other new media I failed to mention is Digital TV—the much-maligned Digital TV. Malign all you want, it's going to happen, and you will need a media box to get the digital stream, and output analog stuff to your existing TV. This is a media engine of such capabilities that you'll be able to do all the delivery things, from games to Internet connectivity and program guides and playing DVDs. There's something happening there. I don't know if it's Digital TV or DVD, but there is a push there causing it to happen.

I like DVD players. I just saw *Singin' in the Rain* and *Blazing Saddles*, which are the two extremes of my taste. This is lovely. It's a great consumer medium. It will be obscenely successful.

If the content is created on boxes running the BeOS, do the players have to have Be code in them to work?

No, no, no. Thank you for asking for the clarification.

There's a big difference between the Roach Motel™ game played in the office market and the media space. In the office market, once you get into Microsoft Office, it's a Roach Motel. You cannot get out. Someone else controls the file formats in such a way that it's very hard to get out.

In the media space, MPEG, AC3 Dolby, FireWire, all these are external formats, not controlled by any of the players. That's where we think we have more room, because no one is playing games with the formats.

From a technical standpoint, what other than an absence of fat legacy code distinguishes BeOS from some of its predecessors?

A number of things—I'll focus on two or three which seem to acquire more saliency as we see applications, because in the end, developers prove what we do. We can say what we want, but when they do something it has more probative value, it makes a better proof.

The combination of multiprocessor and multithreading is unique in the business.

What does multithreading mean, exactly? I'm a little hazy on that.

We heard the word "multitasking" in the past—that meant that you could run several programs "simultaneously." Of course when you have only one CPU you can only run one program at a time, but if you have some function in the machine to switch between programs rapidly you can time-share between the programs. There are various ways of giving

continued on page 108

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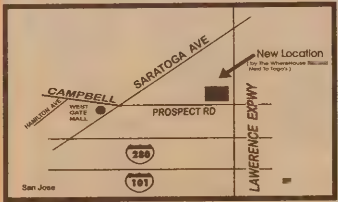

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pleasant service to the client, to the user, when we need a program to do something for us.

In other words, multitasking.

Then it became clear that you wanted a finer granularity of switching between the activities that the computer undertook simultaneously. (When I say simultaneously, we'll stipulate that it's an apparent simultaneity.)

It's illusory.

It's illusory, but it's real. If the illusion is good enough, it's good enough. It's like the persistence of flickering images on our retina—it seems like a continuous image, and it's a continuous image therefore.

That's where the concept of multithreading was invented. So, for instance, within an application, more things could happen simultaneously, independently. If you pull a menu down, the sound continues to play, unlike some older systems. The network doesn't prevent the floppy. You have a finer granularity, a finer division of tasks within the program.

So the program will be more responsive, because instead of moving from one big chunk to another, it will have smaller tasks and will switch more rapidly between smaller tasks. That's what's conventionally known as multithreading.

And we provide multiprocessing. With multiple processors, where you can *really* execute multiple programs at the same time, you can either decompress a file more rapidly, or do more things at the same time—decompressing a file, playing another one, redrawing a window, having multiple movies playing so you can compare edits in real time—or both. You can have more bandwidth, or more agility, or both. That's where we make a unique contribution. More agility, more bandwitdth, with a good marriage of multiprocessing and multithreading. People are blown away by our demos because of that.

The second advantage is that there are a lot of modern features of our OS which make it more robust. For instance, we have a more modern filesystem. We have a 64-bit multithreaded journal file system; when you record transactions, it goes in the journal. So when you pull the plug accidentally, or the power company pulls the plug on you, in conventional workstations, the older UNIX filesystems do a filesystem check, and it takes forever. Here we keep a journal of transactions, so the system backs up a couple of entries and restarts fairly rapidly.

Like a ZMODEM transfer.

Very much so. You keep a log of what you've done, and when something is suspect, you back up a couple of steps and retrace those steps.

So this is very pleasant and very secure for high-volume data. Sixty-four-bit means you can address bigger spaces; multithreaded means that you can do file reads and writes in better apparent simultaneity. You can have better traffic between the computer and your disk, which for multimedia applications is also extremely important, server applications as well.

It happens that for audiovisual Web servers, the combination of the MT-MP and the modern filesystem we have is quite nice.

We've also got better memory protection and a lot of modern things in the basement that make the system more robust for these new classes of applications.

And lastly, but not the least—our system is a lot easier, simpler, pleasant to program. Because the programming model was designed by people who understand the world of software developers, we have a bunch of engineers with such background in Be, so we really designed the OS API with the third-party developer in mind, because from the get-go in this company we assumed that the software developer is the salt of our earth, and therefore we've got to do whatever we can to be attractive. And having a simpler, cleaner, more intelligible, easier to internalize programming model is very important. We have nice development tools from Metrowerks, very pleasant—CodeWarrior native for the BeOS.

As a result of all the modern features of our OS, the executables are much smaller, three to five times smaller than the conventional platform. Which again is very easy for Web commerce.

How much multiprocessor hardware is out there to take advantage of these capabilities?

In the Intel PC space, quite a lot.

Historically they've been network servers?

They used to be network servers, but I just bought an Intel Providence motherboard for a base system—a full system, 30MB of memory, hard disk, etc.—for $2500. Two Pentium Pros, 200MHz, $2500. Retail. I didn't go to Intel, I just went to one of the many clone shops in Silicon Valley. Very nice people. There are a couple of places—one of them next door, Hi-Tech USA, one of the fast-growing PC clone assemblers, does that. A company called SuperMicro, and a company called ALR—there are a dozen companies making MP hardware on the Intel side.

We work in a world that does not need to change its ways for us, whether on the boot loader side with multiple OSes on the hard disk, or easily affordable, available MP hardware. It's just lovely.

On the Mac side, UMAX does a great job there; we have a very good relationship with UMAX in this and other regards. It's different. The Mac world is not used to multiprocessing, because the MacOS cannot support multiprocessing, so you've got a chicken-and-egg situation which we don't find on the Intel space. You've also got this sort of monolithic situation where the Apple culture does not expect more than one OS on the hard disk.

That's why I'm personally an advocate of CHRP, because CHRP in a way will be the PC-AT of the Power PC family. The competitive forces which have honed the PC—a few years ago the PC used to be pretty ugly, with things that didn't fit together well, and it was poorly integrated, but competitive forces in the last five or six years have changed this to a great degree.

USB, Universal Serial Bus, lets you connect 127 devices, of course with hubs; but you have two USB plugs, you can connect the modem, the keyboard, the mouse, the sound control, the scanner, all sorts of slow-to-medium devices to your PC. Plug-and-play, it's taken care of. No more of this trouble.

As some of us say, when you want to add a serial port to your PC, you will grow hair on your chest. It's a really manly thing to do. It used to be that way; the Mac was, and still is in many respects, easier to use than the PC, still today. But the disadvantages of the PC are disappearing; the advantages of the Mac are disappearing with things such as USB and PCI.

Also, the competitive forces missing on the Mac scene have made the hardware less efficient. We see the same code executing on two processors. The PowerPC is faster today, and has been; it's ahead. The problem is the rest of the sandwich isn't. We get confused between benchmarks and processors where clearly the PowerPC is in a great competitive position; unfortunately the rest of the hardware sandwich is not so well put together, because the integration became endogamy.

Became what?

Endogamy. Incest, if you will.

So the current potential of the PowerPC, which we see, is not deployed as well as it could be. That's why I like CHRP, because CHRP could provide the competitive forces and unleash more of the potential in the PowerPC. That would be lovely, and it would do a great service to the Mac community and to the PowerPC processor.

When you first started out, you had a PowerPC box of your own. What happened?

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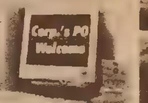

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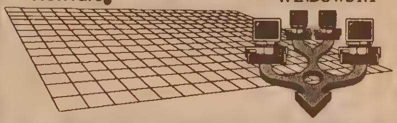

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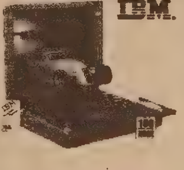

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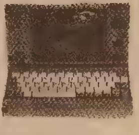

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Last year we demonstrated the BeOS running on a PowerMac. People were a little taken aback, because the performance differences were quite spectacular. No active genius or whatever—when you have a legacy-free OS you don't have layers of software silt that have accumulated over the years. But we don't have the legacy of applications either!

You don't have a Photoshop, you don't have Quark...

No, so we should not compare ourselves on equal terms with a rich platform like the MacOS.

But in terms of raw performance, this was striking.

And the marketplace told us that hey, we see some multiprocessor hardware here with UMAX and DayStar; people are doing the hardware, why don't you focus on the software? So we decided to exit the hardware business, because that's what people wanted. We were very early in the game so we decided we should focus on being a software company.

And that in turn freed you up to do the Intel port?

We'd been discussing the Intel port for a while. Because the decision to do the Intel port is a fairly old one. Eric Ringwald and I went to COMDEX Fall 95; we saw these emerging multiprocessor hardware systems on the Intel side, and we said, "Well, the hardware's there, other people have made the investment; all we have to provide is the software, so we should do this."

It took a little more time, because we're a small company and we're quite busy finishing up a commercial version of our OS; we're quite busy porting to the PowerMac hardware, so it was on the back burner. Finally Intel sent engineers who spent a couple of months here doing the basic foundation work of the port. Intel is quite supportive and helped us by providing resources.

From a developer's standpoint—you're probably going to write your code on one platform or another. What is involved in moving your app from one to the other?

Just recompile. It's nothing. We know, because we've done it. We wrote quite a few applications because we wanted to be sensitive to the experience and the needs of software developers. It's really a no-brainer.

What applications do you see as critical to your success that either do or do not exist yet?

That's "where's the killer app?"—which I don't like. I'd rather call it the "tractor app."

Look at history. When the Apple II started, Mr. Jobs and Wozniak had no idea that two guys in Cambridge, MA, called Bob Frankston and Dan Bricklin, being frustrated with the financial modeling tools they had at their disposal, would write one called VisiCalc. VisiCalc became the tractor app for the Apple II.

A little later, when Mr. Estridge started the PC in Boca Raton, FL, he had no idea that a Transcendental Meditation teacher and disc jockey called Mitch Kapor would get this program in assembly language, very fast, called Lotus 1-2-3.

Back to Apple when Messrs. Jobs and Raskin started the Macintosh, they had no idea that Mr. Warnock, Mr. Brainerd, and Dr. Kitamura at Canon would conspire to create the desktop publishing revolution.

So who am I to contend that I will see, where my elders have failed to see where the tractor app would come from?

If we're lucky, we'll see it. In this case, since the situation makes me myopic, I've got to use Guide Geeks. Seeing Eye Geeks.

What we try to do is focus on the geek community—by this I mean the more technically aggressive, more creative part of the marketplace—and see what they do. Then, as you say in American, we'll jump ahead of the parade. Or as we say in French, we'll fly to victory's rescue. [*laughs*] Same idea, slightly different metaphor.

The reason we are putting out a million copies of the BeOS is to make sure that we dangle the exciting before the excitable.

In the end, it's a game of numbers. Then we've got to nurture the relationship, but it starts with a game of numbers. My view is this:

You have a thousand developers. You go by decimation. One hundred will actually ship something. You go by decimation again. Ten will actually have value. You decimate again. You have one with a tractor or killer app.

Before last week, we had a database of 3700 developers. In theory, we'd have 3.7 killer apps. [*laughs*] You know the stupidity of that numerology, but you also know see that we're trying to get a very large number of very creative people with us.

So you're seeding several continents at once!

Yeah—and we use the Internet as a support and delivery vehicle. And then, when we see an emerging relationship, our evangelism and tech support efforts nurture these relationships and help developers make money, using StarCode's BeDepot or their own access to the Web and customers, advertising their wares. Including on our site—you bet we'll advertise developers' wares on our site.

It's very pleasant, because we see our efforts coming to fruition with developers we saw last week, and we don't have the Intel version yet, which after all is the other 95% of the marketplace. So we feel pretty good.

What have you learned from your bundling arrangements with the cloners? Any interesting feedback?

Not yet, because we started shipping a few weeks ago. We don't know yet. The agreement we made was based on the version of software that started shipping on July 14.

What we've learned is that in general people like what they see, they'd like to see more applications, and that's fair. We get a lot of nice email from well-wishers; we get some bug reports and sometimes we realize "How did we do this?" We feel stupid at times.

On the developer site a lot of bugs are public; we felt we should disclose our bugs because I want to save time for a developer. I don't want the developer to be looking for a bug in his or her code when the problem comes from us. We'll be red in the face occasionally, but if we save time and aggravation for the developer, in the end we're better off.

It's better to be honest about it, in practical terms.

Honesty is one thing; it gets into moral considerations, which is important. There's also another kind of moral, which is the quality of the relationship you have with other people.

Be nice to people.

Again, we fail with great regularity to do the things we should do, so we are regularly humbled. But we'd like to keep a pleasant relationship with developers.

What kind of developer support do you offer?

I'm not very much into ports. Of course I contradict myself immediately—if Adobe decided it would port Photoshop to the BeOS I would be abjectly grateful!

Netscape is doing a port...

Yes, we're doing a port with Netscape of the FastTrack servers, but these are less-established applications. I would not compare Adobe and Netscape in this case—they are both fine companies, but one is more in a fighting mode than the other. You figure it out...

But Adobe's plenty busy taking care of their existing business, and why should they pay attention to us? It's for us to prove ourselves.

So I'm more interested in new code than I am in porting existing code. Someone told me how Bill Gates was trying to get Lotus, when Lotus was the king of spreadsheets on DOS, and WordPerfect, when WordPerfect was the emperor of word processing on DOS, to do

continued on page 122

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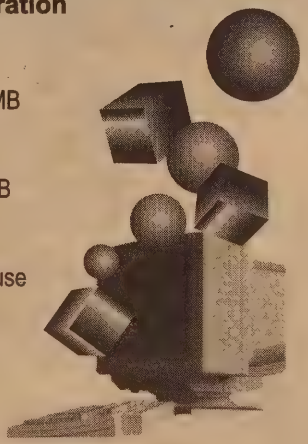

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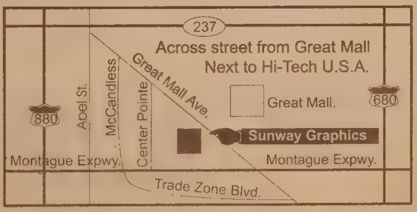

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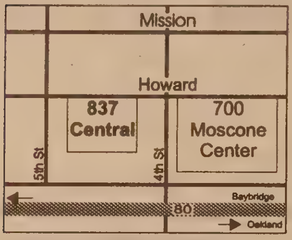

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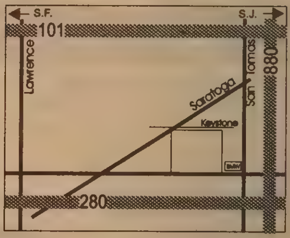

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Central Home Series

- **Intel Pentium®** Processor
- **16MB** EDO RAM, **512k** Pipeline
- Fujitsu **1.7GB** EIDE HDD
- **16X** max CD-ROM Drive
- Teac 1.44MB FDD
- **Diamond** 2500 **2MB** PCI
- J-Pond **Yamaha OPL-3 Sound**
- Diamond Supra 33.6i Fax/Modem
- SP2Multimedia Speakers
- Mitsumi ZW Keyboard
- Microsoft Serial Mouse
- **Microsoft Windows 95** CD
- #3 IWG500 Mid-Tower Case
- **Monitor not included**

Designed for Microsoft Windows 95

133MHz Pentium® **$819**

166MHz Pentium® **$875**

Central Value Series

- **AMD / Cyrix** Processor
- **16MB** EDO RAM, **512k** Pipeline
- J-Bond 500C-H4 Motherboard
- Fujitsu **1.7GB** EIDE HDD
- **16X** max CD-ROM
- Teac 1.44MB FDD
- **Diamond** 2500 1MB PCI
- J-Pond **Yamaha OPL-3 Sound**
- Mitsumi ZW Keyboard
- **Microsoft** Serial Mouse
- Mini Multimedia Speakers 4W
- **Microsoft Windows 95** CD
- Mini Tower Case w/ 230W
- **Monitor not included**

Designed for Microsoft Windows 95

133MHz AMD K5 **$719**

166MHz Cyrix 6x86+ **$735**

166MHz AMD K5 **$745**

200MHz Cyrix 6x86+ **$755**

MONITOR

HITACHI *SuperScan* Monitors

CM500U
15" (13.7" Viewable Size)
Max Resolution 1280x1024 @ 65Hz
Flat Screen, Non-Interlace, MPRII

$280*

CM620U
17" (15.9" Viewable Size) .28
Max Resolution 1280x1024 @ 60Hz
Flat Screen, Non-Interlace, MPRII

$530*

CM751
19" Monitor .26
Max Resolution 1600x1280 @ 75Hz
Flat Screen, Non-Interlace, MPRII

$1050*

*Advertised price reflect special discount given with the purchase of any Central systems. Previous purchase excluded.

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- Reseller and quantity pricing available
- Government, Educational Institution & Corporate Purchase Orders WELCOME
- Prices subject to change w/o notice and to stock on hand. Not responsible for typographical errors

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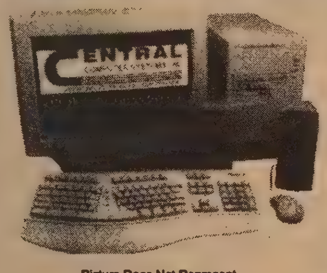
Central Power Series II



Picture Does Not Represent
Exact System Configuration

- **-Intel Pentium II® Processor** with MMX Technology
- **-64MB EDO RAM**
- **-Intel Portland** ATX w/ Two **USB**
- -Western Digital **4GB EIDE HDD**
- **-16X** max CD-ROM Drive / Teac 1.44MB FDD
- **-Matrox Millennium II** 4MB WRAM
- **-Sound Blaster AWE64** Value
- **-Diamond Supra 33.6i Fax/Modem**
- **-Microsoft Windows 95** CD
- **-Yamaha M7** Multimedia Speakers
- -Keytronic PS/2 Keyboard / MS PS/2 Mouse
- -ATX #A2 Mid-Tower Case w/ 235W Power Supply
- **-Monitor not included**

Pentium® II 266 MHz **$2175**

233MHz Pentium® II **$2019**

Central SOHO Series

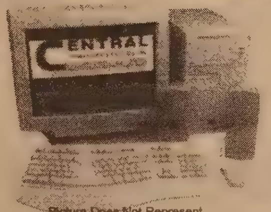
- -Intel Pentium® Processor
- **-32 MB** EDO RAM, **512k** Cache
- **-ASUS P55T2P4, w/ 430HX chipset**
- -Western Digital **3GB** EIDE HDD
- **-16X** max CD-ROM Drive, Teac 1.44MB FDD
- **-Diamond 3D 2000** 4MB PCI
- **-Sound Blaster** 16 PnP
- **-US Robotics Sportser 56k** Int. Fax/Modem
- -SD202 Multimedia Speakers
- -Win104 Keyboard / Microsoft Serial Mouse
- **-Microsoft Windows 95** CD
- -#3 IWG500 AT Mid-Tower Case
- **-Monitor not included**

233MHz Pentium® MMX **$1519**

166MHz Pentium® MMX **$1269**

Central Gaming Series II

- **-Intel Pentium® MMX Processor**
- **-32MB** EDO RAM, **512K** Pipeline Burst Cache
- **-FIC PT2011 TX-chipset** w/ Two **USB** Ports
- **-Western Digital 4.3GB** EIDE HDD
- **-16X** max CD-ROM Drive / Teac 1.44MB FDD
- **-Hercules Stingray 128 3D 6MB** PCI SVGA
- **-Sound Blaster AWE64** Value
- **-Diamond Supra 33.6i** Internal Fax/Modem
- -Microsoft **Side Winder 3D Pro**
- **-Microsoft Windows 95** CD
- **-Altec ACS45** Speakers **w/ Sub-Woofer**
- -Microsoft **Natural Keyboard / IntelliMouse**
- -ATX #A2 Mid-Tower Case w/ 235W Power Supply
- **-Monitor not included**



Picture Does Not Represent
Exact System Configuration

Software/Game Includes:
MechWarrior II, VR Soccer, DescentII Hyperblade, Whiplash, EF2000, Compton's Interactive Encyclopedia and much more!!!

Pentium® 233MHz w/ **MMX** Technology **$1799**

166MHz Pentium MMX **$1539**

Central Graphic Series II

- **-32MB EDO** 60ns, **512k** Pipeline
- **-Intel 430TX** Chipset Motherboard w/ **USB**
- **-Quantum 6.4 GB** IDE HDD
- **-16X** max CD-ROM / Teac 1.44MB FDD
- **-Matrox Millennium II 4MB WRAM**
- -Vibra 16 / **Yamaha M7** Multimedia Speakers
- -Diamond Supra 33.6i Internal Fax/Modem
- -Win104 Keyboard / **Microsoft IntelliMouse**
- **-Microsoft Windows 95** CD
- **-#A2 ATX Mid-Tower Case w/ 235W**
- **-Monitor not included**

200MHz Pentium® MMX **$1559**

200MHz AMD K6 **$1549**

**(price) .... SPECIALS, while supplies last*

http://www.centralcomputer.com for current prices & catalog

HARDWARE

1. CD DRIVES/SOUND CARDS

ADDONICS (portable)

8X Parallel Port CD Rom / w. Sound Card	229/309
10X Pocket Parallel Port	275
12X Max Pocket CD Drive PCMCIA	315
12X Parallel Port CD Rom / w. Sound Card	259/345

CREATIVE LABS

Midi Kit + Software	65
Sound Blaster 16 PnP w/o IDE	55
Sound Blaster 64 AWE Gold	189
Sound Blaster 64 Value Pak	95

DIAMOND

DVD Drive w/ Kit	399

MITSUMI

FX800S 8X IDE Int	75
FX140S2 16X IDE Int	95

NEC

CDR-1610 16X SCSI Int oem	149
MultiSpin 6X Int 4CD Rom Changer oem	**(85)*

PANASONIC

CR-585 24X IDE Int	115
KXL-783A 8X CD PCMCIA	389

PLEXTOR

PX-12CSi 12X SCSI Int (Caddy)	259
PX-20X SCSI Int (Tray)	245

PIONEER

Decode Card	129
DVD101 IDE Int	199
DVD301 SCSI Int	399

SONY

CDU-511 16X IDE Int	95
524E 24X IDE Int	109
PRD-650 Portable 6X w. PCMCIA Kit	345

TEAC

CD-516S 16X SCSI Int	139
CD-524E 24X IDE Int	105

TOSHIBA

5701 12X SCSI Int	125
DVD Drive w/ Kit	415
XM-6102B 24X IDE Int	105
XP3801 15X SCSI Int	145

TURTLE BEACH

Multi-Sound Fiji 20-bit / w. Digital I/O	275/329
Multi-Sound Pinacle 20-bit / w. Digital I/O	375/425
Tropez Sound 32 Voice	145
Wave Table Sound 32	99

OTHERS

CD Caddy	3.99
CD Jewel Case for 1 / 2 / 3-CD	0.55/0.65/0.55
CD Wetsuit (by Kensington) for 12 / 24-CD	9.95/13.95
ESS 16 IDE Sound Card	29
Gravis Ultrasound Plug & Play	135
Gravis Ultrasound Pro, PNP	175
J-Bond ProActive 32 Elegancy PNP	35
Television: TeleSound EX16 IDE	**(68)*

WRITABLE CD DRIVES :

Adaptec ASW-CD Creator (software)	**(169)*
Adaptec InCat Easy CD Pro (s/w)	**(99/259)*
Elektroson: Gear (CD creator s/w)	95
HP SureStore C6020i, read 6X, write 2X, Int	**(395)*
HP SureStore C6020e Ext Parallel	495
HP SureStore C6020e Ext SCSI	495
Panasonic PowerDrive Optical : 2X Write, 4X Read Int / Ext	485/615
- Writable Optical Disk	49.95
Philips CDD-2600 Int	445
Philips CDD-2600 Ext	545
Ricoh CDR-6200S 2X/6X Int	545
Yamaha CDR-400 6X/4X Int / Ext	665/785
3M /Sony / TDK Writable CD (74 min.)	**(5.95) ea*
- 10-Pack	*58*
Kodak CDR 74 min. / 10-pk / 25-pk	*(5.45)/52/125
Pioneer/Traxdata CDR 74 min. / 10-pk	4.50/43

SPEAKERS :

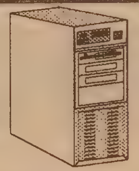
Active 85 (100W)	39
Active SP-690	33
Altec ACS45 w. Sub-woofer	79
Altec ACS51 / ACS52 / ACS53	65/85/125
Altec ACS150 / ACS300.1	99/199
Altec ACS500	295
Koss Speakers oem	29
Labtec Stereo LCS-150	18.95
Labtec Stereo LCS-600	24.95
Labtec 1224 Space Server 3D Stereo (10W)	69
MLF-CP55 Mini Speakers (4W)	**(4.99)*
Yamaha YST-M7 (5W)	45
YST-M15 (10W)	75
Yamaha System 45W (M15 + MSW-10 SubWoofer)	169

SPCIALS

HM2: Headset w. volume control	14.95
KC3: Headphone + Microphone	8.95
MC1: Pocket Size Microphone	9.50
MC2: Condensed Microphone	6.95
SD202: Full Range Speakers, 120W	24.95
SD322: Sub-Woofer	44.95
SD688: Deluxe 3D Surround, 360W	54.95
SD880: Amplified Stereo Speakers, 200W	*(29.95)
SD980: 3-Way Speakers, 180W	*(39.95)
SP2: Supreme Sound Speakers w. KC1	19.99

Reseller CALL for wholesale prices!

2. CASES



#1: Baby AT w. 230W Power	43
#2: Baby Tower w. 230W Power	35
#3: IWG500 Mid Tower w. 230W	65
#4: Mid Tower w. 250W Power	45
#5: CF-8502A Mid Tower w. 250W, Open Side	69
#6: GT212 Mid Tower, 250W, Open Side, 2 fans, White	105
#7: GT210 Mid Tower, 250W, Open Side, 2 fans, Black	109
#8: Full Tower w. 250W, 2 fans	85
#9: CF-8501S Full Tower w. 250W, Open Side	89
#10: KS-A5561 Full Tower, 250W, Slide Open, 2 fans	115
#11: Full Tower, 300W, with Wheels	149
#12: GT312 Full Tower, 300W, Open Side, 2 fans, 8 Bay Slots, PS/2 power, White	155
#13: GT300 Full Tower, 300W, Open Side, 2 fans, Black	165
#14: Mini Tower w. 250W Power	49
#15: Mid Tower w. IDE Mobile Rack	69
#16: 701D Mini Tower w/ 230 Watt	39
#A1: ATX CF-8502A Mid Tower, 235W, Open Side	85
#A2: ATX mini-mid Tower w. 230W	89
#A3: ATX AT-601B Mid Tower w. 235W	89
#A4: ATX-T5 Mid Tower w. 235W, Slide Open	89
#A5: ATX CF-8501S Full Tower, 235W, Open Side	109
#A6: ATX GT-232XC Mid Tower w. 235W	125
#A7: ATX GT-312 Full Tower w. 235W	159
#A8: ATX PC-268A Desktop w. 235W	79
#A9 ATX PC-968A Mid Tower w. 235W	79
#A10 ATX PC-768A Full Tower w. 250W	105
#A11: ATX PC-868, Mid Tower w. 235W	75

HDD EXTERNAL CASING:

3.5" HD External Casing	52
5.25" or CD Rom External Casing	55
1 half ht, 50W, SCSI-2	79
2 half ht or 1 full ht for PC, 80W, w/o cable	82
4 half ht or 2 full ht, 200W, w. cable	105
4 half ht or 2 full ht, SCSI-3 200W w/ Cable	139
7 half ht or 3 Full, SCSI-3	209
8 half ht or 4 full ht, 250W, /SCSI-3	209/259
MAP-431-1 1 half ht & fan, 50W, SCSI-3	92
PD-250 Para Disk, 2.5", IDE Kit, carrying bag	57

ANTEC

KS-011+RPP3002: 19 Bay Server (9 front,10 int. bay) 300W,Hot-Swap + Redundant P/S, 2 Cooling Fan	599
KS-011+RPT600: 19 Bay File Server (9 front,10 int. bay) 300W Redundant Vertical AT P/S, 2 Cooling Fan	479

OTHERS

19" Indsutrial Rackmount Chassis	255
19" Industrial Rackmount Chassis fot ATX, 250W	339

3. CONTROLLERS

adaptec

2940 SCSI PCI w. Kit oem	189
2940U SCSI PCI w. Kit oem / reg	205/249
2940UW Ultra Wide-SCSI PCI w. Kit oem/reg	245/289
AHA3940U PCI Multi-Channel SCSI	399
AHA3940UW Ultra-Wide w. Kit	479
APA1460 Slim PCMCIA SCSI	165
ASW-EZ SCSI 3.1 for Dos & Windows	59
ASW-EZ SCSI 4.0 for Win'95	69

ADVANSYS

ABP5140 SCSI-2 ISA 8Mb/s	115
ABP930 Ultra SCSI PCI 20Mb/s	135

ASUS

AS300UW SCSI & 16-bit audio adapter	215
SC200 SCSI-2 PCI (w. NCR chips)	79

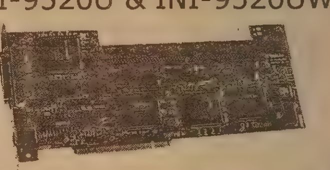
COREL

Corel SCSI Software v2.5	85

initio

I/O BAHN

INI-9520U & INI-9520UW



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Dual Ultra SCSI & 10/100 Ethernet in ONE!

PCI-Ultra/UltraWide w/SCSI Dual Channel Bus Master & Ethernet

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INI-9520UW: **$375.**

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INI-9100
PCI-SCSI
Bus Master Host Adapter
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DIAMOND

FirePort 40 UltraSCSI PCI	159

LDP (Lomas Data)

Fast PCI SCSI-2 10Mb/s	**(115)*
Fast PCI 20, Ultra Wide SCSI, 40Mb/s	215

NEW MEDIA

Basic SCSI DB25 PCMCIA	99
Bustoaster SCSI-2 PCMCIA	165

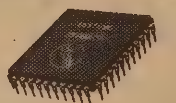
SIIG (5 yr. warranty)

CN2419 EIDE 4HD/ 2FD 16 bit ISA	59
CN2420 EIDE 4HD 16 bit ISA	39
CN2424 EIDE 4HD/ 2FD/ 2S 1P 1G/ 16550 & IEEE1284	79

OTHERS

NEC 2930 SCSI	169
PROMISE EIDE 2300 Plus IDE/ 4HD/ 2S 1P/ 16550	59
WD Fast SCSI-2 PCI, 10Mb/s	79

4. CPUs



AMD

AMD-K5-133	79
AMD-K5-166	109
AMD-K6-166	169
AMD-K6-200	269
AMD-K6-233	339

CYRIX (w. fan)

6x86-P166+ (3.5V)	94
6x86L-P166+ (2.8V)	99
6x86-P200+ (3.5V)	105
6x86L-P200+ (2.8V)	109
6x86MX-166	119
6x86MX-200	169

intel.

486 DX2-66	45
486 DX4-100	49
MMX-166Mhz Pentium®	169
MMX-200Mhz Pentium®	279
MMX-166Mhz Pentium® (3 yr. warranty)	175
MMX-200Mhz Pentium® (3 yr. warranty)	299
MMX-233Mhz Pentium® (3 yr. warranty)	435
P54C-133Mhz Pentium®	115
P54C-150Mhz Pentium®	115
P54C-166Mhz Pentium®	159
P54C-200Mhz Pentium®	269
133MHz Pentium® w. fan (3 yr. warranty)	117
150MHz Pentium® w. fan (3 yr. warranty)	119
166MHz Pentium® w. fan (3 yr. warranty)	225
200MHz Pentium® w. fan (3 yr. warranty)	309
Pentium® II 233Mhz w. fan	589
Pentium® II 233Mhz (3 yr warranty)	595
Pentium® II 266Mhz w. fan	749
Pentium® II 266Mhz (3 yr warranty)	755
Pentium® Pro 180Mhz w. fan	259
Pentium® Pro 180Mhz w. fan (3 yr. warranty)	439
Pentium® Pro 200Mhz w. fan & 256k	529
Pentium® Pro 200Mhz w. fan, 256k, 3 yr warranty	**(535)*
Pentium® Pro 200Mhz w. fan & 512k	1119

OverDrive®:

Pentium® 83Mhz (fr 486-33 or DX2-66)	199
Pentium® 133Mhz (fr P-60 / 66)	199
Pentium® 150MMX (fr P-75 / 90)	335
Pentium® 166MMX (fr P-100)	365

OTHERS

Cooling Fan for 486 CPU	4.95
Cooling Fan for Pentium® processor	6.95

5. DIGITIZERS

SUMMASKETCH

III 12 x 12, 4 or 16 button cursor / stylus	**(249)*
III 12 x 18, 4 button cursor	**(395)*
- 2 button stylus for III	39

WACOM

Art Pad II 4x5, w. Erasing Ultra Pen for PC	135
- w. Fractal Dabbler	155
Art Pad II 4x5, for MAC	139
Art Z II 6x8, w. Erasing Ultra Pen for PC	**(299)*
- for MAC	309
Art Z II 6x8, w. Fractal Expression	365
Art Z II 12x12, w. Erasing Ultra Pen for PC	415
- for MAC	429
Art Z II 12x12, w. Fractal Expression	479
Art Z II 12x18, w. Erasing Ultra Pen for PC	685
UC-520 4-button Puck	45
UP-201 Pressure Stylus	49.95
UP-701E Erasing Ultra Pen	64.95
UP-801E Erasing Ultra Pen	69.95

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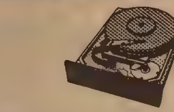
NAVAL AIR STATION - NEC - STANFORD - US BERKELEY - VARIAN - WELLS FARGO

6. DRIVES



One Year Warranty on All Disk Drive

FLOPPY DRIVE :

O.R. Technology

120MB 3.5"	139

TEAC

1.2MB 5.25"	43
1.44MB 3.5" / w. frame	27/31

HARD DRIVE :

FUJITSU

M1636TAU 1.2GB 10ms 128k, 5400rpm, IDE	145
M1623TAU 1.7GB 10ms 128k, 5400rpm, IDE	155
M1638TAU 2.56GB 10ms 128k, 5400rpm, IDE	189
M2954QAU 4GB 8ms Wide-SCSI	629
M2954SYU 4GB 8ms 512k, 7200rpm, SCSI-2	569
M2949SYU 9GB 10ms 512k SCSI	**(1155)*

IBM

DCAS-32160 2GB 8.5ms Ultra-Wide SCSI, 5400rpm	315
DCAS-34330 4.3GB 8.5ms Ultra-Wide SCSI, 5400rpm	429

KINGSTON

PCMCIA 260MB IDE, type III	375
PCMCIA 340MB IDE, type III	445

Quantum

SALE

(limit 1 per customer, while supplies last)

QM32160STS 2GB SCSI-2	**229**
Atlas-2 45500S 4.3GB 8ms 512k Ultra SCSI	**699**

ST-32160A DMA 2GB 10ms 128k IDE	199
QM34320ST DMA 4GB 10ms 128k IDE	299
Atlas-2 2275S 2.1GB Ultra-Wide SCSI	389
Atlas-2 4550W 4.3GB 8ms 512k Ultra-Wide-SCSI	739

Seagate

ST-31276A 1.2GB 12ms 64k IDE 1" ht.	165
ST-32132A 2.1GB 12.5ms 128k IDE	179
ST-33240A 3.2GB IDE	245
ST-34371W 4GB Ultra Wide SCSI	725

*** 5 Year Warranty ***

ST-34501W 4.5GB UW-SCSI, 10,000rpm	895
ST-19171N 9GB Ultra SCSI	1310
ST-19171W 9GB Ultra-Wide SCSI	1345
ST32272N 2.2 GBUltra SCSI 9ms	499
ST32272W 2.2 GB Ultra Wide SCSI 9ms	549
ST34572N 4.5GB Ultra SCSI 9ms	725
ST34572W 4.5GB Ultra Wide SCSI 9ms	769

TOSHIBA (notebook drive)

PCMCIA 262MB IDE	425
MK1401MAV 1.4GB IDE 2.5"	209
MK2103MAV 2GB 13ms 128k IDE 2.5"	299

WESTERN DIGITAL

(limit 1 per customer, while supplies last)

WD-33100 3GB 12ms 128k IDE	**225**

WD-11200 1.2GB 11ms 128k IDE	165
WD-21600 1.6GB 10ms 128k IDE	169
WD-22100 2.1GB 12ms 128k IDE	195
WDC-AC34000 4GB IDE	295
WDC-E2170 2.17GB Ultra SCSI	499
WDC-E2170 2.17GB Ultra-Wide SCSI	525
WDC-E4360 4.3GB Ultra SCSI	699
WDC-E4360 4.3GB Ultra-Wide SCSI	719

OTHERS

Descartes PCMCIA Card Reader /Writer for PC	99
Mounting Frame for 3.5" Hard / Floppy Drive	4/4
Removable Case for 3.5" HD IDE	23
Removable Case for HDD SCSI	25

REMOVABLE DRIVE :

IOMEGA

Jaz Drive 1GB SCSI Int / Ext	275/369
Jaz Disk 1GB / 3 pack / 5 Pack	89/260/430
Zip Drive 100MB IDE oem	109
Zip Drive 100MB SCSI Int / Ext	145/145
Zip Drive 100MB Parallel	145
- Zip Disk 100MB : Single / 3-Pack	16.5/45
- Zip Disk 100MB : 6-Pack / 10-Pack	89/145
Zip Zoom SCSI Accelerator Card (for Ext.)	46

SYQUEST

SyJet 1.5GB SCSI Int / Ext	289/379
SyJet 1.5GB IDE Int / Ext	289/379
1.5GB Cartridge	99

7. I/O CARDS

KOUWELL

KW508-E Single Parallel Port	12
KW524J-1 2S /2P w. 16550 chips	29
KW524L 2S(FiFo) / 1P / 1G w. 16550 chips	32

QUICKPATH

FlexPort 42: 4 Serial / 2 Parallel (Bi - Dir), 16550	99
FlexPort 22EX: 2 Serial / 2 Parallel / 16650	99
PortFolio 550E: 13 Port Multi-I/O, 4 Serial/ 4 FDD/ 2 Parallel/ 2 IDE/ 1G	125

SIIG

Cyberpro 2S Highspeed w. 16650 chips	55
Cyberpro 4S Highspeed w. 16650 chips	89
IO1809 2S/1P w. 16550 chips	39
IIEEE 1284 EPP/ ECP/ Parallel Port	32

SOCKET COMMUNICATIONS

PCMCIA Serial I?O 16550	149
PCMCIA Dual Serial I?O	215

STB 4-COM

4 Serial, 16 bit, 16550, support Com 1-8, IRQ	99

8. KEYBOARDS

FOCUS

FK2001 104 for Win'95	32
FK7200 101 Trackball	32
FK8200 124 Key w. calculator	44
FX9200W 124 Key w. Trackball & calculator	48

KEYTRONIC

104 Key: White / Black	*(29)/45
104 Key PS/2	29.50
Wireless IR Trackball / Classic 104	*79/65
Wireless IR Touchpad	82

MICROSOFT

SALE

Natural Keyboard oem / reg	55/75

QTRONIX

Scorpius 104+ for Win'95: White / Black	23/24
Scorpius 105 / w. Trackball	32/49

SIIG

Minitouch 81-key Click	45
Supertouch 101 Click	53
W104 (for Win'95) / Wintouch 104	29/39

OTHERS

Antec 104: White / Black	21.50/39
BTC 5100 Key Mini (80-key)	35
EZ Key Natural Keyboard	36
Maxi 101	33
Mitsumi 104 Model-ZW	16.50
Northgate Omnikey Evolution/Glide Point	**(95*

9. MEMORY

DIMM

4 x 72 - 60ns, 168-pin (32MB)	199
8 x 72 - 60ns, 168-pin (64MB)	389
Unbuffer SDRAM 2 x 64 - 10ns	79
Unbuffer SDRAM 4 x 64 - 10ns	139

SIMM

1 x 9 - 60ns / 70ns	(1MB)	8/8
4 x 9 - 60ns	(4MB)	25
1 x 36 - 60ns	(4MB, 72 pin)	35
2 x 36 - 60ns	(8MB, 72 pin)	59
4 x 36 - 60ns	(16MB, 72 pin)	79
8 x 36 - 60ns	(32MB, 72 pin)	149
16 x 36 - 60ns		379
EDO 1 x 32 - 60ns	(4MB)	22
EDO 2 x 32 - 60ns	(8MB)	35
EDO 4 x 32 - 60ns	(16MB)	59
EDO 8 x 32 - 60ns	(32MB)	115
Non Parity : 1 x 32 - 60ns		22
Non Parity : 2 x 32 - 60ns		35
Non Parity : 4 x 32 - 60ns		59
Non Parity : 8 x 32 - 60ns		115
Non Parity : 16 x 32 - 60ns		359

NOTEBOOK MEMORY (3rd party)

for AcerNote 374, Nuovo 971/ 972 - 8MB / 16MB / 32MB	95/145/499
for AST Ascentia 950N - 8MB / 16MB	115/165
for AST Ascentia J30 / J50 - 8MB / 16MB / 32MB	85/139/258
for AST Ascentia P30/ P50 - 8MB / 16MB	115/175
for Compaq Armada 4120 / 4130 - 8MB / 16MB / 32MB	95/155/269
for Compaq Contura 410 / 420 / 430 - 4MB / 8MB / 16MB	75/99/155
for DEC HiNote 433 / 450 / 475 - 4MB / 8MB / 16MB	59/89/145
for HP Omnibook 5000 / 5500 - 8MB / 16MB / 32MB	109/165/285
for IBM Thinkpad 365X / 560 / 760EX/ ED/ EL - 8MB / 16MB / 32MB	89/155/525
for NEC Versa 6030X / H - 8MB / 16MB / 32MB	105/165/295
for Panasonic CF-62EX / 25EX - 8MB / 16MB / 32MB	95/145/499
for Toshiba T1900 / T4500 / T200CS - 4MB / 8MB / 16MB	89/109/165
for Toshiba T2100 Series -4MB/8MB/16MB/24MB	65/89/135/195
for Toshiba Portege 610CT - 8MB / 16MB / 32MB	99/149/259
for Toshiba Portege 650/ 660CDT - 8MB/ 16MB / 32MB	95/145/275
for Toshiba Tecra 700 - 32MB	**(235)*
for Toshiba Tecra 710/ 720/ 730CDT - 8MB / 16MB / 32MB	99/149/259
for Toshiba Satellite 430CDS/CDT / 100 / 200CDS/CDT - 8MB / 16MB / 32MB	99/149/259

PCMCIA Flash RAM Card

4MB / 8MB /10MB /16MB/20MB	125/165/179/225/259w

OTHERS

Memory for Laser Printer upgrades	Call

10. MODEMS & FAXS

APOLLO

PCMCIA 33.6 w. AT&T chipset	105

BOCA

SALE

(5-in-1 multimedia)

SE14SRS 14.4 Sound Expression Int	***(79)**
SE34SRS 28.8 Sound Expression Int	***(129)**

DIAMOND

Supra Express 33.6 Fax PNP & Void Int oem	59
Supra Express 33.6 Fax PNP Int / Ext	75/89
Supra Express 56k Fax PNP Int / Ext	139/155
SupraNet Commander ISDN	**(209)*

HAYES (Prac. Peripherals)

SALE

Accura 33.6 Fax Int / Ext	***(125)/159**
Optima 33.6 v.34 Fax Int	**239**
Optima 288 v.34 PCMCIA w. EZ jack	***(145)**
PC288HC 28.8 v.34 Fax, 230K DTE Int	***(219)**
PC288MT 28.8 v.34 Fax Ext	***(199)**
PM288HC 28.8 v.34 Int	***(99)**
PM336HC 33.6 Int	**85**
PM336MT 33.6 Ext	**119**

JATON

Explorer 56k X2 Technology w/ Voice Int.	99

MEGAHERTZ

XJ1336 PCMCIA 33.6 Flash upgradable	209
XJ1560 PCMCIA 56k	224
XJ4288M PCMCIA Fax, cellular w. Motorola cable	249
XJ4336 Cellular Capable 33.6	225
XJ5560 Cellular Capable 56k PCMCIA	**(249)*

MICROCOM

Deskporte 28.8S V.34 Fax Ext	**(115)*
Deskporte 28.8P V.34 Ext Parallel	**(165)*
Officeporte 33.6 Voice ASVD Ext	155

MOTOROLA

SALE

BitSerfer ISA ISDN	***(245)**
BitSerfer TA210 ISDN Ext	***(249)**
BitSerfer Pro ISA ISDN Int	***(298)**
BitSerfer Pro ISDN Easy Ext	***(285)**
BitSerfer Pro ISDN Multilink PPP Ext	***(299)**
Modem Serfer 33.6 Int / Ext	**129/145**
Modem Serfer 56k Int / Ext	**142/159**
Montana PCMCIA 33.6	***(179)**
Montana 33.6 w. cellular cable	***(199)**
Online Serfer 28.8 Fax Int / Ext	***(95/99)**
Premier 33.6 Modem Int / Ext	***(179/199)**

SIMPLE TECHNOLOGY

Communicator 56k PCMCIA w. Voice & Cellular Cap.	199

USRobotics

Courier I-Modem #U with Analog Int / Ext	239/285
Courier I-Modem #2 v.34 w. NT1 Int / Ext	219/275
Courier I-Modem #3 v.34 Int / Ext	199/*(265)
Courier V. Everything 56k Int / Ext	225/265
Sportster ISDN 128k Int	245
Sportster 28.8 Win Modem Int	95
Sportster v.34 33.6 Fax Int oem / reg.	**(89/115)*
Sportster v.34 33.6 Fax Ext	**(139)*
Sportster v.34 33.6 Fax for MAC	215
Sportster v.34 33.6 Fax/ Voice / Speaker Phone Int oem.	109
Sportster v.34 33.6 Fax/ Voice / Speaker Phone Int reg	139
Sportster v.34 33.6 Fax/ Voice Mail/ Speaker Phone Ext.	159
Sportster 56K Int / Ext	165/185
Sportster 56k w. Voice Int / Ext	195/215
Total Control Modem: Pool/8	2150
Total Control Modem: Pool/16	4250

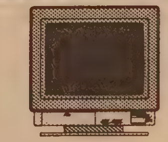
WISECOM

WS-2814 28.8 Data/Fax/Voice Int	55
WS-5614: 56k Data Fax Voice Int.	99

XIRCOM

CM-28 28.8 Fax PCMCIA	**(149)*
CM-33 33.6 Fax PCMCIA	195

11. MONITORS



20 big Monitors on display

ACER

78iE 17" 1600 x 1200 .26 NI	*(525)

ARTMEDIA (Sony oem)

TX1664 15" 1280 x 1024 .25 NI	359
TN1885 17" 1600 x 1280 .25 NI	769
TX1864 17" 1280 x 1024 .25 NI	599
GT960T 20" 1600 x 1200 .25 NI	1489
TN2185T 20" 1600 x 1200 .30 NI	1285

**(price) .... SPECIALS , while supplies last*

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DIGIVIEW

SALE

HR-1434 14" 1024x768 .28 NI	**189**
HR-1508+ 15" 1280 x 1024 .28 NI	249
HR-1708 17" 1280 x 1024 .28 NI	465

HITACHI *SuperScan*

CM500U 15" Flat 1280 x 1024 .28 NI, 65hz	**(289)*
CM620U 17" Flat 1280 x 1024 .28 NI	545
CM630U 17" Flat 1600 x 1200 .28 NI	675
CM751 19" 1600 x 1200 .26 NI, 75hz	1019
CM2011M 20" 1600 x 1200 .28 NI	1165
CM800U 21" 1600 x 1200 .22 NI	1389
CM802U 21" 1600 x 1200 .22 NI	1639
CM803U 21" 1800 x 1440 .22 NI, 77hz	1675

IBM (touch screen)

G41T 14" Touch Monitor .28	895
G50T 15" Touch Monitor .28	985
G70 17" 1280 x 1024 .28, 60hz, FST	785
G70T 17" Touch Monitor .28	1465
P70 17" 1600 x 1200 .26, 60hz	995
G200 20" 1600 x 1200 .28, 60hz	1385
P200 20" 1600 x 1280 .31, 60hz	1785
P201 20" 1600 x 1200 .26mm, 85hz	2445

IIYAMA

SALE

MF-8515G 15" 1280 x 1024 .28 NI	**299**
MF-8617E 17" 1600 x 1200 .26, 69hz, NI	**535**
MT-9017E 17" 1600 x 1200 .25, 72hz, NI	***(625)**
MF-8221E 21" 1600 x 1280 .22, 76hz, NI	**1285**
MF-8721 21" 1800 x 1440 .22 NI, 74hz	**1435**
MT-9021E 21" 1600 x 1280 .30, 76hz, NI	**1269**

IMPRESSION

3 Plus 14" 1024 x 768 .28 NI	179
5 Plus 15" 1280 x 1024 .28 NI	249
7 Plus 17" 1280 x 1024 .28 NI	465

KFC

CA1515DS 15" Flat 1280 x 1024 .28	**(269)*

KOMODO (2 yr warranty)

SALE

H40 14" 1024 x 768 .28 NI, Digital	**(175)*
H51 15" 1280 x 1024 .28 NI, Digital	**(225)*
H73 17" 1280 x 1024 .28 NI, Digital	445
Vienna Pro 17" 1600x1200 .25 NI	649

MAG

DX15T 15" 1280 x 1024 .26 NI	**(359)*
DJ700 17" 1280 x 1024 .26 NI	579
DJ702 17" 1280 x 1024 .26 NI	**(569)*
DX700T 17" 1280 x 1024 .25	665

MAXTECH (GVC, 3 yr warranty)

XT-7800 17" 1280 x 1024 .28 NI	459

NANAO

FX-C5 17" 1280 x 1024 .26 NI	699
FX-C6 17" 1280 x 1024 .26 NI	779
TX-C7S 17" 1600 x 1200 .25, Trinitron	999
TX-D7S 20" 1600 x 1280 .30 NI	1675
FXE8 21" 1600 x 1280 .26 NI	2245
XP3750 37" 1024 x 768 .25 NI, 75Hz	1549

NEC

A500 15" 1280 x 768 .28 NI	*325*
A700 17" 1280x1024 .28 NI	**(579)*
E500 15" 1280x1024 .25 NI	**(359)*
M500 15" 1280 x 1024 .25 NI	*379*
M700 1280 x 1024 .25 NI	**(759)*
P750 17" 1600 x 1200 .25	859
E1100 21" 1600 x 1200 .28 NI	**(1349)*
P1150 21" 1600 x 1200 .25, 75Hz.	**(1549)*
XM3750 37" 1024 x 768 Multimedia Monitor	5475
XP3778 37" 1280 x 1024 Data Monitor	7795

NOKIA

447L 17" 1024 x 768 .28 NI	**(615)*
447XAV 17" 1600 x 1280 .25 NI	985
447Xi 17" 1600 x 1280 .25 NI	**(825)*
445XAV 21" 1600 x 1280 .26 NI	1845
445Xi 21" 1600 x 1200 .26 NI	1739

OPTIQUEST

V655 15" 1280 x 1024 .28 NI, Digital	329
V775 17" 1600 x 1200 .26 NI	625
2082DC 20" 1600 x 1200 .28	1199

PANASONIC

P17 Pro 17" 1600 x 1280 .25 NI	**(715)*
PM17 17" 1280 x 1024, Multimedia	**(619)*
S17 17" 1024 x 768 .27	579
E21 21" 1600 x 1280 .25 NI, 67hz	1385
P21 Pro 21" 1800 x 1440 .25 NI, 71hz	**(1675)*
S21 21" 1600 x 1280 .25 NI, 72hz	1495

PRINCETON

EO70 17" 1280 x 1024 .28 NI	525
EO75 17" 1600 x 1280 .26 NI	619
E090 19" 1600 x 1200 .26 NI	859
Ultra 17 Plus 17" 1600 x 1280 .8 NI	579

SAMSUNG

17GLSi 17" 1600 x 1280 .26 NI, TCO92	699
20GLSi 20" 1600 x 1200 .28 NI, at 66Hz	1235

SCEPTRE (3 yr warranty)

P401 14" 1024 x 768 .28 NI, Digital	189
P531 15" 1280 x 1024 .28 NI, Digital	265
P73A 17" 1280 x 1024 .26 NI, Digital	489
P73B 17" 1280 x 1024 .26 NI, Digital, Black	509

LCD PANEL: (1 yr warranty)

CD-1111S 11.3" DSTN, 800 x 600, 64k color	875
CD-1112T 12.1" TFT, 800 x 600, 256k color	1725
FT15 15" TFT LCD 1024x758 Color	2499

SHAMROCK

SRC-1407 14" 1024 x 768 .28 NI, Digital	179
SRC-1502L 15" 1280 x 1024 .28 NI, Digital	245
SRC-703LD 17" 1280 x 1024 .28 NI, Digital	459
SRC-705 17" 1600 x 1280 .26 NI, Digital	485

SONY

CPD-100SF 15" 1280 x 1024 .25, 60hz	*(369)
CPD-100SX 15" 1280 x 1024 .25, 60hz	345
17SEII 17" 1600 x 12000 .25 NI, plug & play	**(869)*
CPD-200SF 17" 1280 x 1024 .25 NI, 75hz	699
CPD-200SX 17" 1280 x 1024 .25 NI, 60hz, PNP	629
20SEII 20" 1600 x 1200 .25 NI	1799
CPD-300SFT 20" 1280 x 1024 .30, 80hz	**(1349)*

TVS

9" 1024 x 768 VGA Mono	119

ViewSonic

E641 14" 1024 x 768 .28 NI	219
E655 15" 1024 x 768 .28 NI	295
15GA 15" 1280 x 1024 .28 NI, built-in speakers	**(375)*
15GS 15" 1024 x 768 .28 NI	339
17EA 17" 1280 x 1024 .28 NI, plug & play	565
17GA 17" 1280 x 1024 .27 NI, plug & play	**(625)*
17PS 17" 1600 x 1280 .25 NI, Pn'P, TCO	**(665)*
G771 17" 1280 x 1024 .27 NI	569
GT770 17" 1280 x 1024 .25	645
PT770 17" 1600 x 1280 .25	**(689)*
PT775 17" 1600 x 1280 .25, Sonictron	799
G800 20" 1600 x 1280 .28 NI	**(1035)*
GT800 20" 1600 x 1280 .30, Sonictron	1129
G810 21" 1600 x 1280 .30	**(1349)*
P810 21" 1600 x 1280 .25	**(1349)*
P815 21" 1800 x 1440 .25 NI	**(1499)*
PT813 21" 1600 x 1280	**(1449)*
29GA 29" 1280 x 1024 .75 stripe pitch	**(2195)*

WYSE

WY-15E 15" 1280 x 1024 .28 NI	399
WY-17E 17" 1280 x 1024 .28 NI	645
WY-17PS 17" 1280 x 1024 .25 NI	825
WY-55 Terminal 14" Amber/ Green/ White	275 ea.

ACCESSORIES :

VGA Monitor Splitter : 4 Port / 8 Port	155/195
VGA, Keyboard Switch : 4 Way	19.95
VGA, Keyboard & Mouse Switch : 2 Way	24.95
VGA, Keyboard & Mouse Switch : 4 Way	34.95

12. MOTHERBOARDS

ASUS (w/o cpu)

KN97X Pentium® II 440FX, ATX	285
P55T2P4 586-200, PCI, 512k, Burst SRAM	155
P6NP5 Pro 200Mhz, w. IDE I/O & 440FX chipset	249
P65UP5 Pro 200Mhz, dual Pentium® slots	545
TX97 512k,, TX chipset, w. Dimm socket	169
TX97E 512k, TX chipset, 4 Simm/ 2 Dimm	177
TX97XE ATX 4Simm/2Dimm 512k / w. Sound	179/209
XP55T2P4 586-200, PCI, ATX, 512k Burst SRAM	159
16MB, 2x72, for Asus board	105
32MB, 4x72, for Asus board	185

DFI (w/o cpu)

G586IPV P-200, 4PCI, 3ISA 256k	139
G586IPC P-200, ECC & Parity supported	175
G586VPS Pro-200Mhz, 256k, 4PCI, 4ISA	179

FIC (w/o cpu)

PA-2005 586-200, 256k, IDE I/O, VIA chipset	99
PT-2006 586-200, 512k, T3, IDE I/O	109
PT-2200 586-200, 512k, T2, IDE I/O	115
PT2007 586-200 512k TX, ATX 4Simm/2Dimm	125
PA-2007 586-200, 512k VIA, IDE, I/O	119

intel. (w/o cpu)

AN430TX ATX, 512k w/ Sound	195
AN430TX ATX 512k w/ Sound, 2MB VGA	235
LT430TX ATX 512k IDE I/O	179
Marl 586-200Mhz, ATX, w. 512k USB	135
Portland Pentium® II 440FX w. audio	285
Portland Pentium® II 440FX w/o audio	255
Venus Pro-200, IDE I/O, w. 440FX oem	179
Venus Pro w. USB oem	229

J-BOND (w/o cpu)

PCI500C-G2: P-200, 4PCI, EIDE, 430HX, 256k	109
PCI500C-G2: P-200, 4PCI, EIDE, 430HX, 512k	119
- w. AHA-2940UW SCSI on board, 512k	265
PCI500C-H2: P-200, 256k, EIDE, 430VX	
- w. AHA-2940 SCSI on board, 256k	159
PCI500C-H4: Pentium® II 266Mhz, 512k, VX (support Intel, K5, K6, Cyrix CPU)	105
PCI500C-J: P-300 CPU Alarm, ATX	129
-w. AHA-2940UW SCSI on board	259
PCI600A: Pro-200, 4PCI, IRDA, 440FX, ATX	199
- w. AHA-2940UW SCSI on board	345

M-TECH (w/o cpu)

486-DX4-133 256k PCI, 30-pin & 72-pin	109
Mustang-R534 586-200Mhz, 512k, w. IDE I/O	139
R539 512k, TX chipset, 4 Simm / 2 Dimm, EIDE.	135
R557 512k, TX chipset, ATX, 4 Simm / 2 Dimm	149
R653 Pentium® II 440FX, ATX, EIDE I/O	209

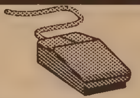
SUPERMICRO USA (w/o cpu)

P5MMA ATX, 512k, TX chipset	152
P5MMS 512k, TX chipset	149
P5MMA 98 ATX w. 512K TX chipset	169
P5MMS 98 w. 512k TX chipseet	149
P5STE 586-200 512k, PCI, EIDE I/O, T2, 512k	155
P6DNE Pro 200Mhz, dual Pentium® slots	315
P6DNF Pro 200Mhz, dual Pentium® slots, w. IDE I/O & 440FX chipset	**(339)*
P6DNH Pro 200Mhz, dual Pentium® slots, w. IDE I/O & 440FX chipset	619
P6DKF Dual Pentium® II 440FX, IDE I/O	359
P6SAS Pro 200Mhz, 2940UW, ATX	299
P6SKE-II Pentium® II 440FX, ATX, EIDE I/O	225
P6SKS Pentium® II 440FX, ATX, SCSI & EIDE	335
P6SNE-II Pentium II 440FX IDE, I/O	225
P6SNS Pro 200Mhz, w. 2940UW	299

TYAN (w/o cpu)

1564D Tomcat IV, 512k 430HX	209
1564S Tomcat IV, 512k, 430HX	169
1571S w. 512k, 430TX chipset	149
1572 w. 512k, 430TX chipset, ATX	145
1680S Pentium® II 512k, ATX	265
1686D Dual Pentium II, 440FX	*(329)
1686S Pentium II 440FX ATX	239

13. MOUSES & JOYSTICKS



KENSINGTON

Expert Bus 5.0	115
Expert Serial & Trackball 5.0	**(89)*
Mouse in a Box	**(26.95)*
Orbittrack Ball	52
Thinking Mouse (Serial & PS/2)	**(59)*

LOGITECH

Cordless Mouseman 96 / Pro	69/75
Mouseman 96 / Mouseman Bus	52/64
Mouseman Sensa	29
Serial Combo PC & PS/2 oem / reg	29/45
Trackman Live Cordless	125
Trackman Marble for Win'95 oem / reg	59/82

Microsoft

Bus 2.0 400dpi w. Bus Card oem / 5-Pack	65/325
Combo Mouse (Serial + PS/2)	49.95
Easyball w. Freddi Fish CD	49.95
Home Mouse Serial	29
IntelliMouse 3.0 for Win'95	**(69)*
- oem serial / oem PS/2	42/42
PS/2 2.0 (round connector) oem	35
Serial 2.0 400dpi oem	29

MOUSE SYSTEMS

Mouse! Serial w. Pad	19
Omni Mouse (new version)	26
PC Mouse III (3-button optical)	49.50
PC Trackball II	39.95
ProAgio (5-button serial)	39
Serial Bus Card (9IRQs) - 5 com.	29

NEC

2-button King Mouse	19.99

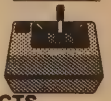
QTRONIX

Libra 90 Pro Trackball	35
Opto-Mechanical Mouse	7.50

OTHERS

AGILER ATB-610 Serial Trackball	19.95
AGILER Bus Mouse	23
ANCER 3-button Black	19
ANTEC Serial Mouse	**(6.95)*
GENIUS Netmouse Serial / PS/2	19.95 ea.
GENIUS Netmouse Combo (serial + PS/2)	24.95

JOYSTICK :



C.H. PRODUCTS

Flight Stick Pro / Pro Pedals	53/79.95
Virtual Pilot / Pro (Yoke)	68/75

LOGITECH

Wingman Extreme oem / reg	39/47
Wingman Standard w. free CD	**(29)*

MICROSOFT

Side Winder 1.0	29
Side Winder 3D Pro	46
Side Winder Game Pad	39

THRUSTMASTER

ACM Gamecard	29.95
F-16 FLCS	125
F-16 TQS	129
F22 Pro Flight Control (programmable)	139
Flight Control System MK II / w. US Navy Fighters	65/79
Flight Control System Pro	108
Formula T2	119
Rudder Control	109
UPROM	29.95
Weapon Control MK II	109
Wizzard (pinball controller + Royal Flush CD)	39
XL Action / w. EF2000 game	28/33.95

OTHERS

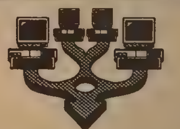
Cobra (by Mouse Systems)	**(9.95)*
Command Pad (by Quickshot)	**(5.99)*
CyberFlight Joystick + Dark Forces	39
Cyclone 3D	43
Dexxa Control Pad w. CD games	18
Game Card (add-on)	**(7.95)*
Game Gun + Crime Patrol	39
Gravis Eliminator Game Card 2 Port	19.99
Graivs Game Port Y Splitter	9.95 ea.
PC Analog Pro Joystick	19.95
PC Gamepad Pro	29
Power Ramp (10-in-1 gamdpad)	49.95
Walt Disney Mouse Pad	4.99 ea

- 101 Dalmations - Mickey Mouse
- Pocahontas - Timon & Pumbaa
- Toy Story - Winnie the Pooh

Warner Brothers Mouse Pad	5.99 ea

- Bugs Bunny - Daffy Duck
- Homer Simpson - Marvin the Martian
- Tasmanian Devil
- Tweety & Sylvester - Wile E Coyote

14. NETWORKS



Government & Education Pricing
Please Call!

3Com

3C250A FMS 100BaseTX Fast 12 Port HUB	**(1165)*
3C509B TPO oem	**(59)*
3C509B-TPC (TP + BNC) oem / reg	*(79)/115
3C509B Combo 5-Pack	499
3C515-TX Fast 10/100 ISA oem / reg.	129/145
3C562D PC-Card Modem 33.6 + Lan TPO	*(269)
3C562D PC-Card Modem 33.6 + Lan Combo	*(299)
3C575TX 10/100 PC Card	155
3C589D PCMCIA TP / 5-Pack	*(139)/675
3C589D PCMCIA Combo / 5-Pack	*(179)/875
3C597-TX EISA 10/100 TP	239
3C862 Impact ISDN U-Interface (w. NT1) Int	**(225)*
3C882 Impact IQ ISDN with V.32bis Ext	**(265)*
3C900 PCI TPO	105
3C900 PCI Combo oem / reg	*(99)/135
3C905-TX PCI 10/100 TP oem / reg	**(79/99)*
3C16170 Link Builder (12TP)	**(299)*
3C16405 Port Switch 40 Hub 12 Port	479
3C16406 Port Switch 40 Hub 24 Port	895
3C16590 Dual Speed 12 Port Hub	1195
3C16591 Dual Speed 24 Port Hub	1845
3C16670A Superstack II 12 Port Hub	**(469)*
3C16671A Superstack II 24 Port Hub	845
3C16700 TPO Office Connect HUB (8TP)	**(119)*
3C16701 TPC Office Connect HUB (8TP + BNC)	**(149)*
3C16720 Office Connect 100 HUB 8 Port	**(665)*
3C16730 Office Connect 10/100 Switch 4TP 1 Fast	**(775)*
3C16900A Switch 1000 24 Port 1 Fast	**(2275)*
3C16901A Switch 1000 12 Port 1 Fast	1599
3C16941A Switch 3000TX 8 of 100TX Port	1975
LANPLEX products	**call**

adaptec

ANA-6901 32 PCI Full Duplex TP / Combo	**(85/99)*
ANA-6910TX PCI Fast-TX, 32 bit bus mastering	175
ATM 25.6Mb/s PCI with 128k / 512k	299/389
ATM 155 Mb/s 512k PCI UTP	725
EM525 Ethernet 16 Combo	**(49)*
EM932 EISA 32 bit Coax / TP	**(98/99)*

ALLIED TELESYN

3012TR Workgroup Hub 12 Port (12TP+AUI+BNC)	175
3016TR Workgroup Hub 16 Port (16TP+AUI+BNC)	199
3024TR Workgroup Hub 24 Port (24TP+AUI+BNC)	259
MC12T: UTP - BNC Conversion Kit	119
MR815T Mini Hub 8 Port	69

**(price) .... SPECIALS, while supplies last*

http://www.centralcomputer.com for current prices & catalog

15. NOTEBOOKS / DESKTOPS / PALMTOPS

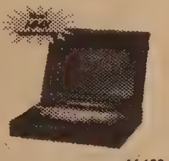
ACER

Nuovo 971: P-133Mhz, 16MB, 1.3GB, 6X CD, 28.8 modem, 11.8" TFT	3495
Nuovo 972: P-133Mhz, 16MB, 1.3GB, 6X CD, 28.8 modem, 11.3" DSTN	3095
Nuovo 975: P-166MMX, 32MB, 2GB, 10X CD, 33.6 modem, 12.1" TFT	4595
TI-610CD: P150, 16MB, 1.4GB 11.3" DSTN	1995
TI-610CDT: P150, 16MB, 1.4GB, 11.3" TFT	2575

ALCOM (Samsung oem)

FX-252: P133, 16MB, 1.4GB, 10X CD, 11.3" DSTN	1795
XL-354: P133, 16MB, 1.4GB, 10X CD, 12.1" TFT	2395
XL-380: P150, 32MB, 2.1GB, 10X CD< Li-ion, 12'1" TFT	2895

CHEM USA



ChemBook 2600: 16MB, 1.4GB, 10X CD, Zoom Video Ready, Win'95, 12.1" DSTN,	
- P133/ 166	1895/1995
- P166MMX	2095
- P200MMX	2295
Upgrades:	
- to 12.1" TFT	add 500
- to Li-Ion Battery	add 100
- to 2GB Hard Drive	add 150
ChemBook 6800: 16MB, 1.4GB, 11X CD, `12.1" DSTN, 3 PCMCIA	
-P133/P150/P166	1795/1825/1865
-P166MMX/P200MMX	1899/2045
Upgrades: (For 6800)	
-To 12.1" TFT	add 500
-To Li-Ion Battery	add 100
-To 2GB HDD	add 120
Chembook 9750: 16MB, 2GB, 10X CD, 12.1" TFT, Lithium Battery:	
-P166/P200	2665/2765
-P166MMX/P200MMX	2735/2875
Upgrades: (For 9750)	
-To 32MB RAM Built-in	add 120
-To 13.3" TFT (frm 12.1" TFT)	add 625
-To 16X CD-ROM Drive	add 50
ChemBook 2700 Ultra Screen 14.2" TFT, Support up to P233 MMX	Call

EVEREX

48 hr. nationwide manufacturer direct service

With 16MB, 10X CD, Win95 & MS Bundle	
Cedar P150, 1.4GB, 12.1" DSTN	2175
Cedar P166MMX, 2.1GFB, 12.1" TFT	3295

FUJITSU

Lifebook 635T: P133, 16MB, 1.3GB, 28.8 modem, 12.1" TFT	2245
Lifebook 655TX: P150MMX, 16MB, 1.3GB, 33.6 modem, 12.1" TFT	*(3545)
Port Replicator Enhanced Unit for 635 & 655	355

HITACHI

MX-166T: P166MMX, 16MB, 2.1GB, 8X CD, 33.6 modem, 10BT, 12.1" TFT	**(3295)*

VisionBook Plus: P-133, 16MB, 1.4GB, 10X CD, 33.6 Modem, 12.1" DSTN	1699
VisionBook Elite: P166MMX, 16MB, 10X CD, 56k Modem, 2.1 GB, 13.3" TFT	4895

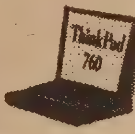
HP

Omnibook 800CS/100 (F1171A): 16MB RAM, 772MB, 10" DSTN	2395
Omnibook 800CT/133 (F1175A): 16MB RAM, 1.3GB, 10.4" TFT	3195
Omnibook 800CT/ 166MMX (F1360A): 16MB RAM, 2GB, 10.4" TFT	4095
Omnibook 5500CTS/120 (F1324A): 16MB RAM, 1.3GB, 16-bit Sound, 10.4" TFT	**(2295)*
Omnibook 5700CT/150MMX (F1352A): 16MB, 2GB, 12.1" TFT	4445
Omnibook 5700CT/166MMX (F1353A): 16MB, 2GB, 12.1" TFT	4695
Upgrades: 10X CD Rom (F1347A): for 2000 / 5500 /5700	335

PALMTOP:

200LX 80 column 2MB (F1061A)	459
200LX 80 column 4MB (F1216A)	549
300LX 2MB, 640 x 240 (F1220A)	465
320LX 4MB, 640 x 240 (F1221A)	629

IBM



TP560: P-133Mhz, 8MB, 2.1GB, 12.1" TFT	3795
- w. 11.3" DSTN	1899
TP760ED: P-133Mhz, 16MB, 2.1GB HDD, 6X CD, 12.1" TFT	3995
TP760EL: P-133Mhz, 16MB, 2.1GB, 12.1" TFT	4645
TP760XL: P-166MMX, 16MB, 2.1GB HDD, 12.1" TFT	3899
TP760XD: P-166MMX, 32MB, 3GB, 8X CD, 28.8 modem, 12.1" TFT	4895

KEYTECH USA

KB6280: 16MB, 2.1GB, 12.1" TFT, 11X CD,	
w. P166Mhz / P200Mhz	2525/2595
w. MMX-166Mhz / MMX-200Mhz	2595/2825
KB6280: 16MB, 2.1GB, 11X CD, 12.1" DSTN,	
w. P166Mhz / P200Mhz	1985/2075
w. P166MMX / P200MMX	2065/2295
Win95	add $90

MAXTECH

753TS: 8MB RAM, 1.3GB, 8X CD, 11.8" TFT, support TV video, w. P133Mhz / P166Mhz	2125/2295
Upgrade to 12.1" TFT	add 280

RIX

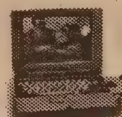
AP6400: 16MB, 2.1GB, 11X CD, 12.1" TFT,	
- P133Mhz / P166Mhz / P166MMX	2485,2565,2635
Upgrades: - 32MB built-in	add 125

- w. Win'95 loaded	add 90
822: P-133Mhz, 16MB, 1.3GB, 6X CD, Win'95,	
w. 11.3" DSTNT	1665
w. 11.3" TFT	1995

SCEPTRE

S3900: 8MB, 1.3GB HDD, 11.3" DSTN, Win'95,	
- P100Mhz / P133Mhz / P150Mhz	1495/1645/1695
S4000: 8MB, 1.3GB, 10X CD, 12.1" TFT, Win'95, Li-Ion,	
- P100Mhz / P133Mhz / P150Mhz	2395/2585/2655
Upgrades: (For S3900 & S4000 Series Only)	
- 2GB HDD	add 125
- w. 16MB built-in	add 75
- w. 32MB built-in	add 195
S4500: P166MMX, 16MB, 12X CD, 33.6 Modem, Li-Ion 11.3GB/2GB	3445/3655

TOSHIBA



Portege 660CDT: P-150Mhz, 16MB, 1.35GB, 10X CD, 28.8 modem, 11.3" TFT	Call
Satellite 110CS: P-100, 8MB, 810MB, 11.3" DSTN	1245
Satellite 220CDS: P133, 16MB 1.4GB,10X CD, 12.1 DSTN	2085
Satellite 425CDT: P-100, 8MB, 810MB, 6X CD, 11.3" TFT	1999
Satellite 430CDT: P-120, 16MB, 2.02GB, 10X CD, 11.3" TFT	2295
Tecra 500CDT: P-120, 16MB, 1.2GB, 12.1" TFT, 6X CD, 28.8 modem	2945
Tecra 500CS: P-120, 16MB, 1.2GB, 12.1" DSTN, 28.8 modem	1750
Tecra 510CDT: P-133, 16MB, 2.1GB, 12.1" TFT, 10X CD, 28.8 modem	3385
Tecra 730XCDT: P-150MMX, 16MB, 1.2GB, 6X CD, 12.1" TFT, 28.8 modem	4795
Tecra 740CDT: P-166MMX, 16MB, 3GB, 10X CD, 28.8 modem, 13.3" TFT / w. Docking	57996350

TWINHEAD

Slimnote 700C: 11.3" DSTN, 1GB HDD, Win'95, 16MB,	
- w. P-120	1199
- w. P-133	1299
Slimnote 700T: P-133, 1.2GB, 16MB Win'95, 11.3" TFT.	1495
Slimnote 700PCMCIA 10X CD Ext	315
Slimnote 9133T: P-133, 12.1" TFT, 10X CD, 33.6 modem, Win'95, Lithium Ion Battery,	
- w. 1.3GB HDD	2799
-w. 2.1GB HDD & 16MB / 32 MB	2999/3165
Slimnote 9133V: P-133, 11.3" DSTN, 1.3GB 16MB RAM, 10X CD, Win'95	1945
- w. built-in modem	add 175
- w. 16MB RAM add-on	add 195
- w. 11.3" TFT	add 525
- w. Lithium Ion Battery	add 100
Slimnote 9150T: P-150, 12.1" TFT, 32MB RAM, 2.1GB, Win'95, 10X CD, Lithium Ion Battery	3195
Slimnote 9166T: P-166MMX, 12.1" TFT, 2.1GB, 32MB, 33.6 modem, 10X CD, Win'95, Li-Ion	3795
- upgrade to LCD 1024x768	add 300

US ROBOTICS

Palm Pilot Personal 512k	279
Palm Pilot Prof. 1MB	369
- Belt Crib Case	24
- Cradle for Windows	29
- Deluxe Leather Case	58
- Palm Pilot Modem	129
- Pen 3-pk	7.99
- Cable for MAC / Pen 3-pk	25/7.95
-Slim Leather Carrying Case (1010U)	25

ACCESSORIES

Kensington: Wet Suite for palmtop	11.50
Kensington: Saddle Bag (Brown)	*(59.95)
Kensington: Port: MicroSaver	39.95
Port: DEFCOM I (motion-sensor)	49
Targus: Leather Convertible Backpack (CLC-1)	89
Targus: Notepad Case (CN01)	29.95
Targus Notepad Plus (CNP-1_	45
Targus: Player Pad Case (23125)	49.95
Targus: Universal Carrying Case (CUN-1)	65
Targus: Universial APS Case (CUN-1A)	66

Notebook Memory see Cat.#9 (pg.2)

DESKTOP SYSTEMS

DIGITAL

Celebris FX2: P200 MMX, 32MB, 3.2GB, 12X CD, Win NT 4.0	1999
Prioris XL 6200: P-200 PRO, 32MB, 2GB, 12X CD	2750
Venturis FX2: P166, 16MB, 2GB, 12X CD, Win95	1195

HP

Vectra 525MCX: P166MMX, 24MB, 2.5GB, 16X CD, 33.6 Modem, Win 95	1499
Vectra VL5/200MT (D4577A): P200, 16MB, 2.5GB, 8X CD, Win 95	1495
Vectra XA5/200 (D3993A): P200MMX, 16MB, 2.5GB, 8X CD, Ethernet 10/100 Win 95	1750
Vetra XA/200MT (4776N): Pro-200, 32MB, 2.5GB, Win NT 4.0, Ethernet 10/100, 8X CD	2745

IBM

300GL (628238U): P166, 16MB, 2.5GB, 16X CD Win 95	1145
300XL (658812U): PII-233, 32MB, 2.5GB, 16X CD Win 95	2050
300XL (65881U): PII-266, 32MB, 4.3 GB, 16X CD Win NT 4.0	2950

*** Please Call for Models that are not listed ***

NETWORK (con't)

MR820TR MicroHub 8 Port (8TP + AUI + BNC)	115
MX26F Fiber Optics Transceiver	145
MX40F Fiber Optics Transceiver	139

APOLLO

PCMCIA Lan Ethernet Adapter Combo	79

ARTISOFT

Extra Mail for Win'95	215
I-Share 2.0 (internet for Lantastic)	179
Lantastic 7.0 for Single - CD / FD	85/89
Lantastic 7.0 10-user - CD / FD	355/359
Lantastic 7.0 1-user Add On	129
Lantastic 7.0 Starter Kit 2-user - CD+FD	249
Lantastic 7.0 Unlimited User - CD	725
Lantastic PowerSuite :	
- 1 / 5 / 10 / 25-user	149/599/1075/2295
- conversion for 1 / 5 / 10-user	89/345/595
NR-Pro 2000A Combo / 10-pack	85/755
NR-Pro 2000T TP / 10-pack	79/625

ASANTÉ

10T HUB 8 Port (8TP + 1BNC)	**(115)*
10T HUB 12 Port (12TP + 1BNC + 1AUI)	**(219)*
10T HUB 24 Port	**(345)*
Fast 100BaseTX 12 Port Hub, stackable	**(1475)*
Fast 100BaseTX 12 Port PNP	**(1195)*
FriendlyNet 5 Port Hub TP	**(62)*
FriendlyNet 8 Port Hub TP	**(69)*

ASCEND

P25-IU-FX: ISDN Pipeline 25 + 4 Ethernet	**(455)*
P25-IU-PX: ISDN Pipeline 25 + IP Routing	**(525)*
ISDN Pipeline 50 w. UBRI	**(599)*
- w. Secure Firewall P50	add 350
ISDN Pipeline 75 w. UBRI	**(675)*
- w. Secure Firewall P75	add 350
ISDN P130-UBRI-FT1	**(1295)*
- w. Secure Firewall P130	add 690
MAX200+ (M201 - 4BRIU)	2975
MAX1800 (MX18 - 8BRIU)	**(4995)*

Bay Networks

AT2202001 Bay Stack 100BT 12 Port	1595
CG1001E01 Bay Stack 12 Port	599
CG1001E02 Bay Stack 24 Port	975
Lattislink 2800A: 16TP + 1AUI	559
Lattishub 2803: 16TP + 1AUI Stackable	599
Lattisswitch 28115R 10/100 TP 16 Port	7795

CASTELLE

FaxPress 1500N Ether 1 Line for NW & NT	1995
Office Connect Ether 2P Printer Server	299
Office Connect Ether 1 Line Fax Server	1195

CHEYENNE

Arc Serve 6.1 for Win - 5 to 25-user (netware)	**(395)*
- upgrade Workgroup edition	239
Arc Serve 6.1 for Win - 50 to 1000-user	1095
- upgrade Workgroup edition	415
Arc Serve 6.0 for Win NT 4.0 Single Server	**(399)*
Arc Serve 6.0 for Win NT 4.0 Enterprise	**(699)*
Arc Serve 6.0 for Win NT Workstation	185
Arc Serve for Mac - 5 / 20-user	159/309
Arc Solo Backup s/w for Dos / for Win	119/118
Fax Server NLM 5.0 - 5 / 10 / 25-user	355/639/999
Inoculan for Netware Server 4.0 Unlimited	585
Inoculan for Win'95 (Anti-Virus)	45
Inoculan for Win NT Server	575
Inoculan for Win NT Workstation Client	46

CISCO

CPA-762 ISDN BRI w/ NT1	525
CPA1604 Bridge w/ NT1	1295
CPA-2501 Router 1 Ethernet / 2 Serial	1695
CPA-2514 Router	2195

CNet (Advanced Network)

930 PCI PNP Full Duplex	**(29)*
2000E+ PNP ISA Combo	27
4020ERP 2 Port Coax Repeater	165
8800TPC HUB: (8TP + BNC)	**(79)*
8816TPC HUB: (16TP + BNC)	**(159)*

DANPEX

2900P2 PCI Combo	**(34)*
3270 Emulation for PC / for PS/2	175/195
5250 Emulation for PC / for PS/2	199/235
6200P2 PCMCIA (type II) BNC+TP	85
9400P3 32bit PCI Combo (DEC, full duplex)	**(69)*
EN-1600 16 Port HUB R.M.	**(159)*
ER-200 2-port Repeater Coax	185
ER-400 4-port Repeater Coax	299
ET-509 Translator (UTP to BNC)	109
ET-510 Translator (UTP to AUI)	107
FE-1000TX ISA 10/100BaseTX	**(98)*
FE-1400TX PCI 10/100BaseTX	**(99)*
Print Server (2P 1S) NW / Unix / Appletalk	**(235)*

DIGI INTERNATIONAL

IMAC Bridge 1 ISDN	1165
IMAC Bridge Dual IMAC	1595
PC IMAC - ISA: Server, 1 ISDN	525
PC IMAC / 4-1: Multi-ISDN Expansion	665

FARALLON

Mac & PC Connection products	Call

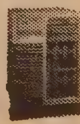
FRONTIER

Super TCP / SuperWeb	Call

HEWLETT PACKARD

Advanced Stack 8 Port HUB (J2610B)	245
Advanced Ethernet Hub 8E (J3128A)	185
J2550B Jet Direct TP	299
J2552B Jet Direct Combo	345
J2556B JetDirect 10/100 Combo	*(399)
J2573A 10/100 VG Selectable ISA	169
J2585B 10/100 VG Selectable PCI	135
J2590A Jet Direct EX Plus 3 for 100VG	549
J2591A Jet DirectEX Plus Combo	295
J2593A Jet DirectEX Plus 3 Combo	395
J3175A Advanced Switch 208T	1045
J3200A Advanced Switching 12 Port	425
J3201A (J3200A) + SMNP (J3210A)	**(499)*
J3202A Advanced Switching 24 Port	825
J3203A (J3202A) + SMNP (J3210A)	**(899)*

NETSERVER :



D4841B 6/200 LH PRO Pro 200, 32MB /1GB max ECC, 256k L2, 6-hot swap shelves 2 UW SCSI-3 Controller, CD, 3yr onsite warrenty from HP Optional: Redundant Power Supply Upgradable to Dual CPU.	6695
D4315B 6/200SMP LX PRO	17295

D4840A LH PRO P6/200	4850
D4934A E40 P6/200	2650
D4937A E40 P6/180	1999
HP Support Pak (Extended Warrenty)	call

IBM

Token Ring 16/4 Turbo ISA (72H3482)	245
Token Ring PCMCIA 16/4 Auto	349

intel.

EE11TX 12 Port 10 & 100 Dual Speed Hub	999
- bundled with 10 of PILA 8465B	**(1625)*
ES101-TX Switching Hub 10/100	**(2099)*
EILA 8225 EtherExpress 32 Flash EISA Combo	219
EILA 8265 PRO/100 for EISA	**(199)*
EtherExpress Pro 10 bit cards :	
- PCLA 8210 BNC+TP oem / reg / 5-pk.	**(65/95/325)*
- PCLA 8220 TP reg / 5-Pack	**(89/315)*
- PCLA 8205 Flash BNC+AUI+TP	135
- PCLA 8215 Flash BNC + TP	125
- PCLA 8225 Flash TP	*115*
LANdesk Virus Protect 4.0	945
MBLA 1600 PCMCIA 10/100	**(159)*
PCLA 2451 Netport Express Pro/100 Ext	359
PCLA 3151 Netport Express Pro Int.	295
PILA 8465B PRO/100 PCI TP oem / 5-Pack.	**(69/375)*
PILA 8480 Pro 100 Server Adapter	485
PILA 8500 PRO/10 PCI Combo oem	**(85)*
PILA 8520-TPO PRO/10 PCI oem	**(69)*

KINGSTON

Etherx 10/100 Fast PCI	74
Etherx 10BT PC Card	95

LANPRO

EN2000PXA PNP Full Duplex Combo	**(29)*
- w. Novell Personal Netware	**(54)*
EN5200PX PCI Combo	**(32)*
Fast 100 HUB 8 Port / Stackable	*(459)
Fast 100 HUB 12 Port	**(599)*
HUB : 5 Port (5TP)	**(55)*
HUB : 8 Port (8TP + BNC)	**(75)*
HUB : 16 Port (17TP + 2AUI + 2BNC)	**(175)*
PS1000A Print Server Simple Port	*139*
SD200 2 Port Easy Switch 10 BT & 100TX	445

LINKSYS

Fast 100TX 4 Port Hub Stackable	195
Fast 100TX 8 Port Hub	359
Fast Switch 10/100 TX 2 Port	395
Fast Switch 10BT & 100TX 5 Port	1795

MEGAHERTZ

XJ10BC PCMCIA Ethernet Combo	**(165)*
XJ10BT PCMCIA Ethernet TP	**(125)*
XJEM 3336C Modem 33.6 + Lan Combo	325
XJEM 3336T Modem 33.6 + Lan TP	*(255)

MICRODYNE (Eagle)

EH800E 8 Port HUB	**(119)*
EH1200E 12 Port HUB	**(175)*
NE 10/100 ISA	**(89)*
NE 10/100 PCI	119
NE2000+ TP / 5 pack	**(75/329)*
NE2000+ Combo / 5 pack	**(85/399)*
NE2500 Combo, plug & play oem	**(35)*
NE5500 32 bit PCI Combo	**(109)*

MICROTEST

CD-Now for Netware: 25-user / 50-user	489/695
Disc View Pro	265
Disc Serv (includes Disc View)	529

NOVELL

SALE

Intra Netware Kit for Small Business: (server + 5-user + 2 Danpex ISA Combo + 5 port 10BT hub)	*(545)

Intra NetWare 4.11:	
- 5 / 10 / 25-user	*(695/1295/2095)
- 50 / 100-user	2895/3995
- 250 / 500 / 1000-user	7295/15995/30995
Intra Netware for Small Business (for < 25-user):	
- Server + 5 License	599
- 1 / 5-user license	59/225
Lan Workplace 5.0 single / 10-user	195/1295
Netware 3.12 (3.5" FD)	
- 5 / 10 / 25-user	**(675/1295/1895)*
- 50 / 100-user	2695/3495
Netware Connect 2 Ports / 8 Ports	355/1375
Netware Connect 32 Ports	3895
Netware NFS v1.2C	2850
Netware NFS Service 2.1	2195
NFS Client for Lan Workplace	205
Unixware Personal Edition v2.01 - CD version	**(99)*
Unixware SDK v2.1 - CD version	**(75)*

PALINDROME

Network Archivist NLM 3.1A Backup	**(195)*

SHIVA

LanRover/2E Plus 3.5 Async TP v.34	1695
NetModem/E 28.8 Ether BNC + TP	1295

SMC

Ether EZ Combo	115
Ether EZ TP (8416T) oem	**(58)*
Elite Ultra 32 EISA Combo	**(195)*
Etherpower PCI TP (8432T) oem	**(69)*
Etherpower PCI Combo oem	**(85)*
EZ Hub 100TX 8 Port	635
Tiger HUB: 100TX 12 Port	1195
Tiger HUB: 3212TC (12TP + BNC + AUI)	349
Tiger HUB: 3314T 14 Port	**(459)*

WISECOM (5 yr warranty)

D300CT PCI Bus Mastering	**(36)*
H008CAT 8 Port HUB (8TP + AUI + BNC)	**(75)*
HI16CAT 16 Port HUB (16TP + AUI + BNC)	155
P200CT NE2000 ISA Combo, plug & play	26

XIRCOM

CE3-10BT PCMCIA TP	**(115)*
CE3-100BTX 10/100 PCMCIA	**(155)*
CEM33-BC 33.6 Modem + Lan Combo	**(299)*
CEM33-BT 33.6 Modem + Lan TP	**(255)*
CEM56-100BTX: 56k Modem + Fast Lan	**(299)*
PE3-10BC Pocket Adapter Combo	**(279)*
PE3-10BT Pocket Adapter TP	**(259)*

CABLES & ACCESSORIES :

Custom-made Cables, Cross-Overs available call

16. POWER SUPPLIES

APC

AMERICAN POWER CONVERSION

BF-250 Back-UPS Office Kit ($30 Rebate)	165
BK-280 Back-UPS (200W), 2 out	105
BK-400 Back-UPS (300W), 2 out	154
BK-450 Back-UPS (325W), 4 out	179
BK-600 Back-UPS (425W), 4 out	239
BK-900 Back-UPS (650W), 6 out	345
BP-280 Back-UPS Pro PNP, 2 out	159
BP-420 Back-UPS Pro PNP, 4 out	235
BP-650 Back-UPS Pro PNP, 4 out	289
BP-1000 Backup Pro, 6 out	375
SU-450 Smart-Net (486, 586 WS), 4 out	275
SU-700 Smart-Net (486, 586 FS), 4 out	365
SU-1000 Smart-Net (FS & WS), 6 out	495
SU-1400 Smart-Net (950W), 6 out	625
SU-2200 Smart-Net (1600W), 8 out	1095
SU-3000 Smart-Net (2250W), 8 out	1675
SUVS-420 Smart Value Server, 4 out	239
SUVS-650 Smart Value Server, 4 out	295
SUVS-1000 Smart Value Server, 6 out	415
PowerChute Plus :	
- for Novell	65
- for OS/2, Lan Server, 3 Com	75
- for Unix / Xenix	99
- for Win & Win'95	55
- for Win NT	69
Surge Arrest (PER 7)	17.99
Surge Arrest w. TEL (PER 7T)	22.99
Surge Network Strip (NET 7)	29.95
Surge Protector (P7)	9.99

PC POWER COOLING

CPUcool for 486 or 586-75 / 133 (1.9")	18.95
CPUcool for 586-150 / 200 (1.9W)	19.95
CPUcool for Pentium® Pro (3.2")	22.95
Silencer Slim 230 for Baby or Mid Tower	69
Silencer 230 Full Tower	89
Silencer 270 for Full Tower	124
- Slim for Baby or Mid Tower	114
Silencer 235 for ATX	84
Silencer 275 for ATX	124
Standard 230 for Full Tower	85
Turbo Cool 300 for ATX	126
Turbo Cool 300 for Full Tower	125
- for Slim (baby or mid tower)	115
Turbo Cool 400 for Full Tower / for Slim	**(176/175)*
Turbo Cool 400 for ATX	199
Turbo Cool 450 for Full Tower (heavy duty)	285
Two-inOne 500 (slim, redundant)	215
Twinpower 900 (redundant)	895

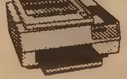
OTHERS

235W for ATX	49
250W for Baby or Mid Tower	29
250W for Baby or Mid Tower, PS/2 (by Kingspao)	45
300W UL for Full Tower , PS/2	49
300W for Full Tower, PS/2 (by Kingspao)	59
RPT-600 300W Redundant for Tower	179

ACCESSORIES

Battery Tester M-032	6.50
Belkin Power Authority F5C120	**(17.95)*
DMM: DT-890B (A,V,O,C,Hfe)	19.95
DMM: DT-830B (Adc,V,O,Hfe) pocket size	8.95
DMM: KT-7113 (A,V,O,C,Hfe) auto ranging	24.95
DMM: KT-7244 (A,V,O,F,Hfe)	21.95
DMM: M-3900 (A,V,O,Hfe) big LCD	17.95
Power Center Switching Systems	13.50

17. PRINTERS / PLOTTERS



Printer memory available. Please call for $

ARGOX

Rabit214 Lable Printer w/ Software	569

BROTHER

HL-720 True 600dpi, 6ppm, Laser	345
HL-730DX True 600dpi, 6ppm, Laser	395
HL-1660 17ppm, Laser, 1200x600dpi	1185
MFC-4550 5-in-1, 600dpi, Laser, Fax	769
MFC-6550 6-in-1, fax/ copy/ scan/ print etc.	999

CANON

BJC-70 Color, 720x360dpi, 346cps	**(299)*
BJ-240 Color, 360x360dpi, 4ppm	189
BJC-620 Ink Jet, Color, Par, 720dpi	**(299)*
BJC-4300 InkJet Color	199
BJC-4550 11" x 17", 5ppm, 720x360dpi	475

EPSON

FX-870 9-pin	295
FX-2170 9-pin, Wide (max. 6 copies)	449
LQ-570 Plus 24-pin	259
LQ-870 24-pin, Par	455
LQ-2070 24 pin, Wide	**(389)*
LQ-2170 24-pin, Wide	549
Stylus 400 Color, 3ppm, 720dpi	209
Stylus 600 Color Inkjet, 720x1440dpi	289
Stylus 800 Color, 8ppm, 720x1440dpi	419
Stylus 1500 720dpi, fit A - C size paper	485
Stylus 1520 Color	759
Stylus Photo (C209011)	449

Accessories :

Black Ink for II & IIS	19.95
Black Ink for 400/ 500/ 600	21.95 ea
Blakc Ink for 400/ 800 (SO20025)	12.95
Black Ink for 800 Color/ 1520	24.95
Color Ink for II & IIS	29.95
Color Ink for 400/ 600/ 800	24.95 ea
Coated Letter Paper 720dpi (S041062), 100 sheet	13.95
High Quality A4 Paper (S041111) , 100 sheet	9.50
Iron-On Paper (making T-Shirt)	15.95
Photo Quality A4 Paper (S041061), 100 sheet	12.95
Photo Quality Glossy (S041124), 20 sheet	10.95

HEWLETT PACKARD

Color Laser Jet 5 (C3961A)	3875
Color Laser Jet 5M (C3962A)	4945
Desk Jet 670C (C5884A)	208
Desk Jet 692C	295
Desk Jet 820CXi / 870CXi	*(285)/379
Desk Jet 1000CXi (C2673A), print size 4x5 - 11x17	485
Desk Jet 1600C PC, Mac	1299
Desk Jet 1600CM Postscript PC, Mac	1899
Laser Jet 4V / 4MV (B size)	1795/2595
Laser Jet 5 (C3914A)	999
Laser Jet 5M / 5N	1525/1285
Laser Jet 5Si / 5SiMX	2349/3395
Laser Jet 6LXi	389
Laser Jet 6PXi / 6MP	745/879
Mopier (C4176A) 5Si / Bundle	4445/6545
Office Jet 590 4-in-1 (C4645A)	595
Office Jet Pro 1150C Color (C5300A)	939
Portable 340	295

PLOTTERS

Design Jet 350C: D Size / E Size	2195/2795
Design Jet 750C: D Size / E Size	4995/5695
Design Jet 755CM: E Size	8195

Accessories :

C3067A: Color Kit for 540	**(37)*
C3169A: Postscript for 5Si	435
C3760A: Lower Cassette for 4V / 4MV	325
C3762A: Duplex for 5Si / 5SiMX	479
C3765A: Envelope Feeder for 5Si	379
C3918A: Postscript for 5 / 5N	335
C3920A: Duplex for 5 / 5N / 5M	475
C3921A: 500 Sheet Feeder for 5	225
C3927A: Power Envelope Feeder for 5	259
C4533A: Color Kit for 600	**(39)*

Ink Cartridges :

(HP51626A) Black for 500, 540, 560	24.45
(HP51625A) Color for 500C, 550C, 560C	26.95
(HP51629A) Black for 600, 660	24.95
(HP51649A) Color for 660C	29.25
(HP51645A) Black for 870C, 855C, 1600C	26.95
(HP51641A) Color for 870C, 855C, 1600C	28.95
(HP51640A) Black for 1200C	23.95
(HP51640C) Cyan for 1200C	27.95
(HP51460M) Magenta for 1200C	27.95
(HP51640Y) Yellow for 1200C	27.95
(HPC3105A) Black for Color Laser Jet	7.95
(HPC3102A) Cyan for Color Laser Jet	32.95
(HPC3104A) Magenta for Color Laser Jet	32.95
(HPC3103A) Yellow for Color Laser Jet	32.95

Paper:

92296T: Transparency Film for Laser, Letter, 50 sheet	18.95
C1812A: Greeting Card, Letter, 20 sheet	11.95
C1846A: Photo Paper, Letter, 20 sheet	10.95
C2974A: Glossy, Letter for 5/ 5M, 50 sheet	41.95
C5973A: Premium Glossy, Letter, 25 sheet	22.95
C5976A: Bright White Inkjet, Letter, 200 sheet	6.95

Toner Cartridges :

(HP92295A) Toner for II, IID, III, IIID	75
(HP92275A) Toner for IIP, IIP+, IIIP	74
(HP92291A) Toner for IIISi, 4Si, 4SiMX	129
(HP92298A) Toner for 4, 4M, 4+, 4M+, 5, 5N, 5M	89
(HP92274A) Toner for 4L, 4ML, 4P	65
(HPC3900A) Toner for 4V, 4MV	139
(HPC3906A) Toner for 5L, 5ML	59
(HPC3903A) Toner for 5P, 5MP, 6P, 6MP	75
(HPC3909A) Toner for 5Si, 5SiMX	179

IBM (network printer)

#4312001: Laser, 12ppm, 600dpi, 4MB	1025
#4317001: Laser, 17ppm, 600dpi, 4MB	1365
#4324001: Laser, 24ppm, 600dpi, 4MB	2345

LEXMARK

Optra C 600dpi, 3ppm color, Postscript, 8MB	4495
Optra E 600dpi, 6ppm, 1MB	395
Optra LX+ 1200dpi, 16ppm, Par, Postscript, 4MB	1595
Optra R+ 1200dpi/8ppm, Ser & Par, 2MB, Postscript, 600dpi/16ppm	1049
Optra RN+: R+ w/ Ethernet TP	1285

NEC

Superscript 860 Laser	**(389)*

OKIDATA

ML184T 9 pin, Par (max. 5 copies)	235
ML320T 9 pin (max. 5 copies, 290cps)	**(325)*
ML390T 24 pin, 312cps, for Win & Win 32	345
ML520 9-pin, 430cps	**(385)*
ML590 24-pin (max. 5 copies)	449
ML591 24-pin, Wide (max. 5 copies)	625
OkiJet 2010 Color, 600dpi	**(199)*
OkiPage 4W Laser 4ppm	**(199)*
OL600E Laser, 6ppm, 600dpi	*(295)
OL610E Laser, 6ppm, 600dpi, 2MB	485
OL810E Laser, 8ppm, 600x1200dpi	*(565)
OL1200 Laser 12ppm, 600x600dpi, 2MB	**(949)*

SEIKO

Smart Label Printer EZ30	145
Smart Label Printer Pro	235
Standard Label (2 rolls)	7.95

SUMMAJET (Plotter)

1324C Color A - D Size	2250
1324M Mono A - D Size	1990
1336C Color A - F Size	2695
1336M Mono A - F Size	2465
D Size Stand / E Size Stand	325/365

OTHER ACCESSORIES

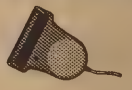
Auto Switch (non-power) 2 to 1	11.50
Auto Switch (non-power) 4 to 1	22.50
Data Switch: 2 Way / 4 Way	5.99/8.99
Parallel Auto Switch 2 to 1 bi-directional	19.95
Parallel Auto Switch 4 to 1 bi-directional	29.95

18. PROJECTORS

PROXIMA

Desktop DP5100 LCD	3499
Desktop DP5500 LCD 640 x 480, zoom	4599
Ovation 810 LCD 8.4" 2M Color, 640 x 480	1665
Ovation 944 10.4" LCD 16.7M 1280 x 1024	6395
Ovation+ 840 8.4" LCD 16.7M 800 x 600	2195
Ovation+ 846 10.4" LCD 16.7M 800 x 600	2695
Portable Overhead A653 3000 Lumens	475
Portable Overhead A655 4000 Lumens	799

19. SCANNERS



ACER (flatbed)

AcerScan 300F Color	**(185)*

AVISION

AV100 Color	179
AV360C Color	149

DELRINA

WinFax Pro Scanner	**(299)*

HEWLETT PACKARD

ScanJet 4C Color & Gray Scale w. Kit	749
- Auto Document Feeder (C2525B)	475
- Transparency (C2521B)	635
Scanjet 5P Color/ Grayscale	385

MICROTEK (flatbed)

Scan Maker III w. TMA & Photoshop OCR	**(1399)*
Scan Maker E3 600dpi, 24-bit Color, w.OCR.	**(195)*
Scan Maker E6 1200dpi, w. OCR	**(285)*
Scan Maker E6 Pro 1200dpi w. Photoshop OCR	499
Scan Maker V300 w. Paperport	225
Slide Maker 35T 1800dpi, 16.8M Color, w. ScanWizard	725
Transparency Adapter for E3	285
Transparency Adapter for E6	285

STORM TECHNOLOGY

Easy Photo Reader Parallel	135
Easy Photo Smartpage Color	175

UMAX

Astra 600S w. Photo Deluxe	245
Astra 1200S Win Deluxe	445

**(price) .... SPECIALS , while supplies last*

(oem) .... $, bundled with hardware only

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SAN FRANCISCO : 837 Howard Street. Tel (415)495-5888 Fax (415)896-5888

20. TAPE BACKUPS

AIWA

TD-S3200 TR-3 Accelerator Card & Seagate BackUp Exec Int	155
GD-B8000 8GB DDS-2 4mm SCSI Int	649

EXABYTE

Eagle TR3 (603003-004) 3.2GB Int w/o card	**(145)*
EXB-8205XL 8mm Dat. 3.5 - 7GB Int / Ext.	1275/1499
EXB-8505XL 8mm Dat. 7 - 14GB Int / Ext	1850/2095
EXB-8700E 8mm 7 - 14GB Ext	925
EXB-8700LT 8mm 5 - 10GB Ext	675

HEWLETT PACKARD

C1534 4mm Dat. 2GB SCSI Int	**(549)*
C1536 4mm Dat. 2-4GB SCSI Int	**(595)*
C1554 Dat. 24GB DDS-3 Int	1045
C1599 Dat. 8GB DDS-2 Int	765
Colorado T1000 850MB Travan w. cartridge Int	**(139)*
Colorado T1000 850MB, printer port Ext	175
Colorado T3000 3.2GB Travan w. cartridge Int	189
Colorado T4000S 8GB Travan Int	359
HP Mounting Frame to 5.25" for C1534/ C1536/ C1599	25
HP Mounting Frame to 5.25" for C1533/ C1554	27

IOMEGA

Ditto 800MB Travan Int	89
Ditto 800MB Travan Parallel	139
Ditto 2GB Int / Ext	129/179
- 2GB Tape / 3-pack	19.95/57
Ditto 3200MB (QIC 3010/ 3020) Int.	209
Ditto 3200MB (QIC 3010/ 3020) Parallel	239

NOVASTOR (software)

Novaback CD Bundle (multi-platform)	**(59)*

SEAGATE

SALE

CNR-4324RP 2 - 4GB SCSI Int	*(575)
CNR-4326RP 4mm 8GB SSCSI w. 5.25" rail	**(725)*
Tape Stor w. cartridge 420MB Int	139
Tape Stor w. cartridge 800MB Travan Int	139

Software (Arcada):

Back Up for Windows '95	65
Back Up Exec for Netware WS 7.0	98
Back Up Exec for Netware Enterprise 7.11	845
Back Up Exec for Netware Single Server	*(399)
Back Up Exec for Netware 1 Server 25-user	315
Back Up Exec for Win NT Enterprise 6.11	795
Back Up Exec for Win NT Server 6.11	395
Back Up Exec for Win NT Workstation.	189

SONY

LanBacker 7000: 8GB DDS-2 w. ArcServe Single Server Internal / External:	1095/1175
WanBacker 7000: *GB DDS-2 w. ArcServe Enterprise Internal / External	1695/1795
WanBacker 9000: 24GB DDS-3 w. ArcServe Enterprise Internal / External	2150/2175

TEAC

FT-3008TR 800MB Travan Int	**(49)*

OTHERS

COMBYTE: DP1800EA 800MB Int	135

TAPE CARTRIDGES:

3M - 4mm 90M	7.50
- 8mm 112M	6.95
- MC3000XL (680MB)	26.50
- Travan (800MB) TR-1	27.95
- Travan (1600MB) TR-3 / TR-4	29.95/34.95
EXABYTE - 8mm 112M, 5GB	9.95
- 8mm 160MXL (for XL drives)	15.95
- 18C 8mm Cleaning Cartridge	19.95
- EXMC 3000XL (1GB)	26.95
- MC3000XL (680MB)	21.95
HP - 92283B 4mm 90M (2GB) / 5-pk	8.50/39
- 92283K 4mm Cleaning Tape 2-pk	21.95
- 92300A 4mm 120M (4GB) / 5-pk	19.95/95
- C1517A 4mm 125M (12GB) DDS-3	29.99
- C1572A 4mm 120M Autoloader	119
- Travan for DT-1000 / 2-pk / 3-pk	29.95/54.95/82
MAXELL - 4mm 90M Dat.	**(7.99)*
- DC2120 (QIC80)	9.95
- DC2120XL (350MB)	16.95
SONY - 4mm 120M for DDS	25.95
- 4mm 90M for DDS-1	8.95
- QIC-Wide 3010 (850MB)	24.95
- QIC-Wide 3020 (1.7GB)	27.95

21. VGA CARDS

ATI

3D Pro Turbo 4MB PCI, PC2TV	169
3D Pro Turbo 8MB PCI, PC2TV	**(225)*
All-in-1 Wonder 4MB PCI	**(239)*

DIAMOND

Fire GL 1000 4MB PCI	199
Fire GL 1000 8MB PCI	269
Stealth 3D 2400XL 4MB PCI	115
Stealth 3D 3400XL 4MB PCI VRAM	185
Stealth 3D Audio Monster Soud reg	189
Stealth 3D Monster 4MB PCI	189
Stealth 2500 1MB DRAM PCI	45
Stealth 2500 2MB DRAM PCI	59
Stealth Video 64 2MB VRAM PCI, upgradable	109

HERCULES

Dynamite 128 PCI 4MB SMDRAM oem	*(109)
Stingray 128 3D 6MB EDO Reg.	249

IMS

TwinTurbo 128P PCI VRAM w. 2MB / 4MB	195/265
TwinTurbo 128P PCI VRAM 8MB	395

LEAKTEK

M-Mate Pro II (external video encoder)	99
Winfast 280 VGA & MPEG-1 w. 1MB / 2MB	145/165
Winfast 430 VGA 2MB VRAM	135

MATROX

Millennium II PCI 4MB oem	225
Millennium II PCI 4MB reg	249
Mystique 220 4MB oem / reg	125/145
Rainbow Runner (For Mystique/Millennium II)	195
Memory Upgrade (Millennium): 2MB/4MB/6MB	85/149/199

NUMBER NINE

Imagine 128 Series II PCI 4MB VRAM	***(229)**
Imagine 128 Series II PCI 8MB VRAM	***(429)**
FX Reality 772 VRAM PCI 2MB	**(115)*
FX Reality 772 VRAM PCI 4MB	**(145)*
Imagine 128 Series II 4MB EDO PCI	**(215)*

SPIDER

Tarantula 3D DRAM PNP w. 2MB / 4MB	75/99
Tarantula 64 MK II 2MB VRAM PCI	105
Tarantula 64 MK II 4MB VRAM PCI	135

OTHERS

Boca Voyage Movie Player Accelerator VGA	285
Movie Plus 1100 MPEG Decoder	199
Televiewer / Televiewer Plus	109/169
Trident 8900 1MB ISA	45
Trident 9680 1MB PCI	39
Tvator Pro PC/MAC VGA to NTSC Scan Converter	119
Tvator Remote Pro VGA to NTSC Scan Converter	289
V-Mate Pro (video encorder : PC to TV)	189

Conferencing & Video:

AGFA: Ephoto 307 Digital Camera	**(295)*
Casio QV-100 640 x 480 Camera	599
Epson PC Color Digital Camera	345
Epson Photo PC-500 Color Digital Camera.	445
- w. PhotoPix LCD Monitor	**(599)*
Epson Photo Pix LCD Monitor	175
Howard Video Camera	295
Intel Smart Video Recorder III	189
Internet Videophone + Video Capture	135
Kodak DC20 Digital Camera	*(175)
Kodak DC25 Digital Camera	*(275)
Kodak DC50 Digital Camera Zoom Lens	*(599)
DC300 Video Camera USB Port.	*169*
Quick Cam for Win / Quick Cam Color	99/225
Snappy 2.0 (video Snapshot)	195
Specom Suite Visions (color digital camera + s/w)	195
Video Logic Captivator	135
USR: Big Picture Camera + Capture	229
USR: Big Picture Video Kit (capture + modem)	225
USR: Big Picture w. Camera	349

SOFTWARE

1. PC SOFTWARE

ADOBE

Acrobat 3.0	189
Acrobat Capture 2.0	559
FrameMaker 5.11 - CD+FD	545
Illustrator 7.0 for Win 32	365
- competitive upgrade	265
Pagemaker 6.5 for Win 32 / S.E. (special)	545/*(295)
Photoshop 4.0 / S.E. (special)	549/*(399)
Premier 4.2 for Win - FD/CD	**(499)*

AUTODESK

Animator Studio 1.1	249
AutoCAD Lite 2.0 / for Win'95	*(255)/409
Autosketch 2.1 for Win & Win'95	89

Borland

C++ 5.0 for Dos, Win, Win32 - CD	325
C++ 5.0 Developer Suite	425
C++ Builder 1.0 Standard / Professional	89/525
Delphi Developer 2 Kit / upgrade	**(395/255)*
Delphi 3 / upgrade	499/249
Paradox 5.0 for Win	**(99)*
Paradox 7.0 for Win'95 & NT / upgrade	265/95
Turbo Assembly 5.5.	115
Visual dBase 5.5 for Win & Win'95	269

COREL

Corel Draw 4.0 (2CD) oem / reg	29/69
Corel Draw 5.0 - CD	**(195)*
Corel Draw 6.0 for Win'95 - CD oem / reg	**(59/299)*
Corel Draw 7 for Win'95 & NT - CD	**(399)*
- upgrade	225
Corel Flow / Corel Flow 3	*(59)/129
Corel PerfecOffice Prof. - CD	275
- upgrade	189
Corel XARA	179
Ventura 7 for Win'95 - CD	549
WordPerfect Suite 3.1 - FD+CD / CD only	265/239
WordPerfect Suite 7.0 for Win'95 - FD+CD	274
- CD only	235

DELRINA

Comm Suite 7.0 for Win'95 - FD / CD	**(95/96)*
CyberJack 7.0 for Win'95	**(48)*
NetSatisfaxtion 3.0 for Novell 25-user	755
Win Comm Pro	79
WinFax Pro 4.0 - FD / CD	79/89
WinFax Pro 4.1 for Network : - 10 / 25 / 50-user	599/1395/2650
WinFax Pro 7.0 for Win'95 - FD / CD	79/79
WinFax Pro Starter Kit (server + 2 notes)	265

IBM

Anti-Virus Desktop 2.5 Single	47
OS/2 4.0 Warp Single : WS / Server	195/539
Voice Type Simply Speaking Gold for NT	89.95

INTUIT

Quicken Deluxe 6.0 - CD / FD	59/58
Quicken 6.0 for Win3.1 & Win'95	38
Quicken Parent's Guide to Money	16
Quickbook 5.0 for Win - CD	97
Quickbook Prof. 5.0 for Win - CD	185

LOTUS

1-2-3 5.0 for Win	299
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cc:Mail 6.1 Systems Pack Server	134
cc Mail 6.0 10-user Client Pack	559
cc:Mail Mobile E-Mail 7.0 for Win'95 & NT	135
Organizer '97 for Win'95	75
Smart Suite 4.0 for Win - CD	**(199)*
Smart Suite 97 for Win 32	**(335)*
Word Pro '96 for Win3.1 & Win'95	**(65)*

MICROGRAFX

ABC Flow Carter 4.0 - CD+FD	299
ABC Graphics Suite Live 6.0 - CD	275
Designer Power Pack - CD	335
Designer Tech Live 4.1 - CD	399
Flowcharter Live 7.0 - CD	279
Graphic Suite #2 for Win'95	315
Picture Publisher Live 5.0 - CD	135
Windows Draw Live 4.0 for Win 32 - CD	24

Microsoft

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- upgrade for Win'95	94
Access 97	299
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Back Office Server 2.5	2295
Back Office Client v2.5 5-user	1199
Dos 6.22	42
Excel 5.0 for Win	295
Excel 97 / upgrade	299/95
Exchange Server with 5 Client.	899
- w. 10 Client / w. 25 Client	1245/1945
- Exchange Internet Connection	459
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Fox Pro 2.6 Single Dos or Win	**(95)*
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Home Essential 97 upgrade	**(94)*
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- upgrade + IntelliMouse	335
Office 97 Intergrate Step by Step	19.95
Office 97 Resource Kit	37
Office 97 Small Business Edition	449
- upgrade to S.B. edition	224
Office 97 Standard / upgrade - CD	445/225
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Project for Win'95	419
Publisher 97 CD Deluxe	74
Services for Netware (add-on NT 4.0)	145
SNA NT Server	395
SNA NT Workstation	199
SQL NT Server 6.5 for 5-user	1299
- 10-user / 25-user	1899/3799
- Client License 5-user / 20-user	685/2175
SQL NT Workstation 6.5	475
SQL Server Internet Connection	2795
System MGMT Server - 5 / 10-client	825/1045
Visual Basic Enterprise 5.0	1095
Visual Basic Prof. 4.0 for Win - CD	445
Visual Basic Standard 5.0 - CD	89
Visual Basic 5.0 Step by Step	24
Visual C++ Learning - CD	89
Visual C++ 5.0 Professional	455
Visual Fox Pro Standard 3.0 for Win	189
Visual Fox Pro Prof. 5.0 / upgrade	449/235
Visual InterDev.	459
Visual J++ (JAVA)	87
Visual Source Safe 5.0	475
Windows '95	**(179)*
- oem version FD / CD	99/85
Windows '95 Plus - FD / CD	44/44
Windows '95 Resource Kit	29.95
Windows NT 4.0 Server Resource Kit	109
Windows NT 4.0 Workstation Resource Kit	59
Windows NT Server 4.0 w. 5-user	**(725)*
Windows NT Server 4.0 w. 10-user	**(995)*
- Win NT License: Single Client / 20 Client	35/599
Windows NT 4.0 Technical Training	**(99)*
Windows NT Workstation 4.0 - CD	285
Windows for Workgroups	135
Word & Publisher Value Pak	125
Word 6.0 for Win	289
Word 97 / upgrade	299/78
Works 3.0 for Win - FD	49
Works + Bookshelf Win'95 - CD	69
Works 4.0 for Win'95 oem.	39

QUARTERDECK

Cleansweep 3.0 for Win '95	38
Hijaak Graphics 3.0 for Win	89
Hijaak Prof 4.0 for Win '95	**(89)*
Internet Suite 2.0	37
MagnaRam 2.0 for Win 3.11 & Win'95	24
Procomm Plus 4.0 for Win'95 - CD	119
Qemm 8.0 for Win '95 / upgrade	63/36
Remote-It 95	35
Speedy Rom for Win'95	**(19)*
Total Web	86
Web Author 2.5 for Win'95	45
Web Compass 2.0	46
Win Probe 95	46
Zip-It for Win'95	37

SYMANTEC

ACT! 2.0 for Win	**(169)*
ACT! 3.0 for Win'95 & NT	175
C++ 7.2 for Win NT & Win'95	69
For Your Eyes Only	75
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Norton Anti-Virus '95 v.2	66
Norton Anti-Virus for Win, Dos, Win'95 - CD	67
Norton Anti-Virus for NT - CD	65
Norton Desktop 3.0 for Win oem / reg	**(45/99)*
Norton Disklock 3.5 for Dos/ Win - CD	79
Norton Healthy PC	28
Norton Navigator '95 - FD / CD.	89.95/89.95
Norton NT Tools.	47
Norton PC Handyman	48
Norton Utilities '95 v.2	69.95
Norton Utilities v.2 for Win NT	89
Norton Utilities 8.0	109
PC Anywhere 5.0 Remote & Host for Dos	124
- v2.0 for Win	125
- v7.5 for Win'95 & NT	135
Visual Cafe v.1 for Win'95 & NT	169
Visual Cafe Pro	399
Visual JAVA: Cafe v1.5 for Win 32	69
WinFax Pro 7.5 for Win'95 - CD	95

OTHERS

3D Eye : TriSpectives / Professional	279/459
CA Clipper 5.3 for Win / upgrade	*(149)/89
CAERE: Omni Page Direct OCR 2.0	65
CAERE: Omni Page Prof. 7.0 for Win'95	435
CAERE: Wordscan Plus 4.0 / upgrade	365/139
Cakewalk Professional for Win - FD+CD	165
Cakewalk Professional Audio Deluxe - CD	285
Canvas for Win	265
Carbon Copy 3.0 for Win, 2-user	119
Claris: File Maker Pro 3.0 for Win	175
Connectons Telemarketing for SBT	**(79)*
CU-See-Me for Win32 (internet Video Chat).	*(45)
Daytime Organizer for Win'95	58
Design CAD 3D 8.0 for Win 32	249
Direct Access 5.1 for Dos	65
Eudora Pro - Single / 5-user	58/215
First Aid 97 - CD oem / reg	29/34
Fractal Dabbler 2.0	46
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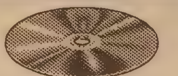

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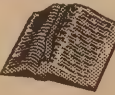

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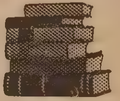

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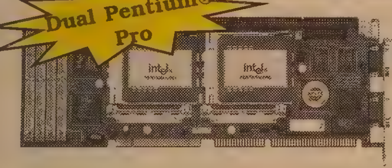

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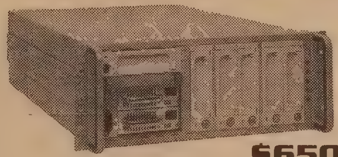

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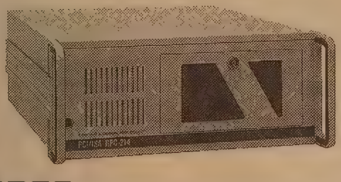

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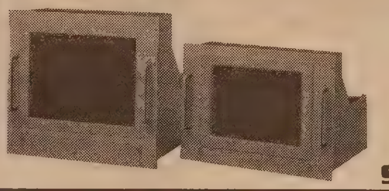

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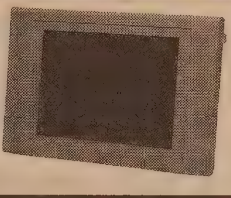

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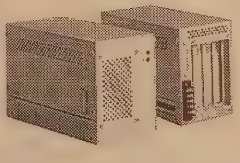

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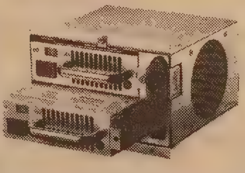

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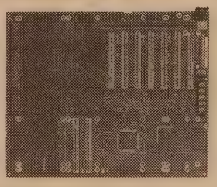

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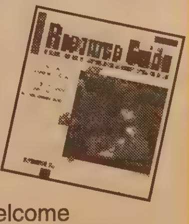

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Against All Odds

continued from page 110

something for Windows. "Nyaah, we're not sure." The incumbents tend to be a little busy minding their own business—because they are successful, they're risk-averse.

Which is why, when you asked me if we're crazy, I said, "Of course." We've got to be. I don't belittle incremental work—what Microsoft has done, starting with DOS, getting today to Windows 95 and next year to Windows 98, is nothing short of wonderful. They've patiently incremented their software, and technically they've done a wonderful job. Windows 95 is a very good system—some people might disagree with me and I respect that, but I use all these systems and Windows 95 is good.

When I hear people criticize Windows 95, part of me says, "Yeah, of course, it could be better." But boy, a lot of people buy it, so I don't think it's necessarily appropriate to criticize the people who buy a product in such large numbers. Microsoft obviously does a good job.

To start with, it's a wonderful job of stable management, and in a way the history of their management team and the history of their products are parallel. The management team is reflected in the product—you have a continuous fairly stable management team and a fairly stable continuous effort on the product, with one metering the other, and that's in part where Microsoft's deserved success comes from. As much as people might fear Microsoft, you've got to give them credit for what they've done.

And all of us know people who started out elsewhere and went to work for Microsoft. It's not the Evil Empire.

No, no, no. All that stuff—people saying last week we saw the Antichrist copulating with the Messiah—it's painful.

It gets in the way after a while. You can take issue with this or that, but carrying on like 5-year-olds doesn 't help.

It's painful. Exactly. I think if Apple and Microsoft agree on a number of standards that make the railroads connect more easily—I was a kid in Europe where going from France to Spain you had to change trains at the border, because you had a different railroad gauge. So if some of these obstacles to progress are removed, why not?

So in the long run, how do you plan to make money?

Well, we make money because once we've created value for software developers, as we are beginning to do. All caveats are stipulated that we still have a lot to do and a lot to prove. But if we do this, then our operating system will have acquired a value for which we can ask for money for future revisions. We give you today's version for free; or you can buy a commercial retail package with the manual and user documentation, and the next two releases.

Basically the way to make money is a subscription model, and some OEM licensing. It's a subscription model which relies upon the fact that we have created something of value for which we can ask some kind of consideration. My goal is to make sure that the virtual circle works, and once it works, the subscription model works, and as a result we make obscene amounts of money!

Because everybody is invested in helping everybody else succeed.

And everything works.

Operating systems, as plenty of evidence shows, are incredible ways to create wealth—not just for yourself, but as you were saying, for an entire network of people and entities. That's what we're doing. ■

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Tuesday Evening Sessions

7:30 pm–9 pm

Open to public and expo attendees.

Keynote Presentations:
Monday, September 29, 1997

9:00 am–10:30 am

Keynote 1: Visions:

Moderator: Craig Cline, Seybold Seminars

Participants: John Warnock, chairman, CEO and co-founder, Adobe Systems Inc.

Mike Homer, senior vice president of marketing, Netscape Communications

A Seybold tradition, the "Visions" keynote will help establish the themes for the week, and will enable some of the industry's top players to share their personal visions with you. These are the folks who are changing the shape of our industry—come hear them present their case to you as to what the future may hold for us all.

11:00 am–12:30 pm

Keynote 2: Futures:

Moderator: Arlene Karsh, Seybold Seminars

Participants: Mark Anderson, president, Technology Alliance Partners, publisher, Strategic News Service

Jim King, a principal scientist, Adobe Systems Inc.

Michael Moon, president and director, Executive Education Programs, GISTICS, Inc.

Dr. Michael Stonebraker, vice president and CTO, Informix Software, Inc.

Frank J. Romano, professor, Rochester Institute of Technology and WGLA

In this keynote we gather together several industry pundits and personalities whom you may not have heard of before. The informal discussion format of this session, however, lets each speaker argue his/her case for what the future holds for us, and also allows you to argue back. If we do our job right, then you'll leave this session wanting to hear more from these folks in the future.

Wednesday, October 1, 1997

9:00–10 am

Special Keynote Session:

Bill Gates, chairman and CEO, Microsoft Corp.

The theme of Gates' address remains confidential, but Microsoft's Web and Internet publishing strategies, as well as its view of publishing's future directions, are certain to be key aspects.

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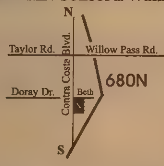

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- **Microsoft Mouse**
- **Keytronic 104 WIN95 Keyboard**
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AMD K6-200/ 233MHz . $1259/ 1359
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Sound Blaster 16 bit PnP
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Microsoft Windows 95
Microsoft Natural 104 Win95 Keyboard
Logitech PS2 Mouse/Pad
US Robotics 56Kx2 Fax/Modem
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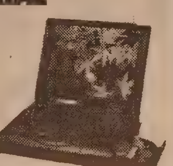

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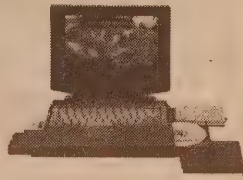

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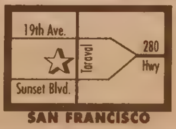

Computers On The Silver Screen

By Herb Mendelsohn

Product Placement In The Entertainment Industry

These days, computers are stars. In movies and television, computer products often play key roles. Last summer a PowerBook saved the human race in *Independence Day*. This spring a Twentieth Anniversary Mac saved Gotham City by designing a better Batmobile in *Batman and Robin*. For the past three years there's been a computer on Jerry Seinfeld's desk in the #1 TV show.

PHOTO: CLAUDETTE BARIUS © 1996 SONY PICTURES ENTERTAINMENT CO. ALL RIGHTS RESERVED.

If you are an independent or start-up company with a great idea, one that looks futuristic, and may even be good for the environment, what is the most cost-effective way to make the public aware of your product? The answer is, Hollywood! "By placing an innovative product in the hands of recognizable stars, a computer company can get huge bang-for-its-marketing-buck!" according to production resource impresario Sam Baldoni, chairman of Baldoni Entertainment Inc.

Case History: Sceptre

Sceptre Technologies Inc. is just such an independent company, one of the few companies producing full-sized LCD monitors. These monitors fit casting requirements perfectly, and Sceptre's FT 15 monitor is becoming a rising star.

"Everyone wants flat-screen technology to shoot because it saves the production companies headaches and money," says Joel S. Henrie, president of Motion Picture Placement.

"Film shoots at 24 frames per second (FPS), the picture on conventional CRT monitors and computers refreshes at 30 frames per second," explains Mark Markum of Playback Technologies. "When Hollywood shoots a computer sequence, effects crews like my company have to play with the gas pedal; we either manipulate the computer to run the CPU and CRT monitor at 24 FPS, or speed up the film to 30 FPS, which makes the picture sync but the sound goes out of whack. Active matrix flat-screen technology refreshes so fast that it eliminates most of the sync problems, but causes some others. Laptop monitors aren't as bright and can't be viewed by all the camera angles a director may need."

Sceptre may have solved at least one of Markum's problems, being among the brightest of all available LCD monitors. "But, due to the nature of the technology, light through liquid crystals," concedes Ed Booth of Sceptre, "you are never going to get as wide a viewing angle." Sceptre's 15" LCD monitors display 262,144 colors (and will support 16.7 million colors) at 1024 x 768 resolution, the same resolution that is optimal on a 17" CRT monitor. Plus, their 15" monitor has a viewable area comparable with most 17" CRT monitors. Many productions want laptops for their computer shots, and a product like Sceptre's sleek 1" deep monitor for cutting-edge/futuristic looking films.

There's also an ecological spin: these new LCD monitors use up to 70% less electricity than CRT monitors. Because LCD monitors take up only 30% the desk space of conventional CRTs, a company which installed Sceptre monitors in its work group would be able to fit in 30% more workstations in the same space. Because the monitors emit no VOMF radiation, and have no flicker, there is far less eyestrain, leading to happier, less stressed computer users.

To get the word out, and reach the worldwide

A laptop (opposite page, bottom right) helps the Vice President (Glenn Close) and the Cabinet in the struggle against terrorists in *Air Force One*. (This page, right) Gary Oldman and his fellow Russian terrorists use a laptop (center left) to aid in their hijacking in *Air Force One*.

PHOTO: CLAUDETTE BARIUS © 1997 SONY PICTURES ENTERTAINMENT CO. ALL RIGHTS RESERVED.

buying audience, Sceptre has reached out to Hollywood, providing flat-screen monitors for films and television shows that we will start seeing this fall. "Final Conflict Earth," a TV show currently shooting in Toronto and based on a script by the master of futuristic television, Gene Roddenberry, will have Sceptre monitors throughout. *Rune*, a psychological thriller from the makers of *Sling Blade*, will feature the company's LCD monitors, as will upcoming TV series "The Pretender" and "Three."

Apple In Showbiz

The big boys in product placement have traditionally been Coke, Pepsi, AT&T, Xerox, and Apple Computer. Apple is the only computer company with a dedicated film and television staff position.

I spoke with Ms. Suzanne Forlenza, Apple's movie maven, who reports that after Apple saw the tremendous goodwill generated by Tom Hanks in *Forrest Gump*, it decided to become very active in the cinema world. (Forrest Gump is asked how he made so much money in the stock market, he said simply that he wanted to buy stock in a good produce company, so he bought something called "Apple Computer." Both the film's producer, Ms. Wendy Finerman, and Tom Hanks had always used Macs, and it seemed to be the kind of lucky mistake Forrest would make during Apple's Initial Public Offering, (IPO) where many other lucky investors profited.)

"Our goal," says Forlenza, "is to create a cachet, a hipness, a coolness for Apple products by finding great stories and placing Apple products in the hands of emulatable stars." Forlenza will have Apple products on as many as thirty films a year but has no control of the final cut. She adds "A director or producer may borrow a PowerBook for the run of the production, often they will buy it from us after the shoot, but we do not give product away, we only loan the production company equipment to be used on screen."

Looking at the list of recent films where major plot points depend on Apple computers, it is easy to see that Ms. Forlenza has been doing a great job. Jeff Goldblum saves Earth in *Independence Day* by creating a virus on his PowerBook and uploading it into the alien spacecraft. Tom Cruise and the MI force receive all their instructions via their PowerBooks, which, in this *Mission: Impossible*, didn't self-destruct. In *The Saint*, Val Kilmer gets all his email from his PowerBook. Alfred the Butler, we find out in *Batman and Robin*, is an Apple computer aficionado and designs life-saving tools for his masters on his 20th Anniversary edition Macintosh. In *The Net*, Sandra Bullock is a systems analyst who only uses Apple. Sylvester Stallone receives all his assignments via email on his PowerBook in the film *Assassins*. The Newton saves Steve Segal in *Under Siege II*.

In the more distant past, *Star Trek IV* has "Scotty" talking into his Mac mouse.

"We also love television," explains Forlenza. "The quick turn-around of about eight weeks, as opposed to film's eight months, makes the small screen an attractive showplace for our latest inventions." You've seen an Apple system on Jerry Seinfeld's desk; Apple is also a regular on the "X-Files," "Millenium," "Melrose Place," "Beverly Hills 90210," "Home Improvement," and "The Naked Truth."

> If you are an independent or start-up company with a great idea, one that looks futuristic, and may even be good for the environment, what is the most cost-effective way to make the public aware of your product? Hollywood!

Equally impressive is the list of films about to be released which will feature Apple prominently. Just wrapped on Treasure Island in San Francisco is *Flubber* starring Robin Williams. Apple had a great time outfitting the comic genius's sci-fi laboratory. Bruce Willis uses Apple in his upcoming film, *The Jackal*, a loose remake of *The Day of the Jackal*, which also stars Richard Gere. Jim Carrey, in a more serious role this time, is "Truman Burbank," an unwitting subject of a 24-hour news story emanating from a TV station controlled by Macintosh computers in *The Truman Show*.

Win Some, Lose Some

But things don't always go the way of the computer. In *Air Force One*, a message must be sent telling the re-fueling plane to request the terrorists to drop Air Force One down to an altitude of 15,000 feet, enabling the hostages to parachute to safety. This message could presumably be sent by email, code, satellite telephone, or some other Hollywood invention. But thanks to some wild notion that when the terrorists jammed the lines, they didn't think of jamming fax lines, a fax machine saves the lives of the presidential entourage aboard the flying White House.

Why a fax? And whose fax machine would get the implied endorsement, though fictional, of the President of the United States? It's a Xerox fax machine, and the handwritten page left unread, sitting in the White House Situation Room, created tension, lots of tension. Xerox provided support equipment during the shoot, and even paid a technician to be on the set during the filming of the fax sequence, but nowhere does

continued on page 241

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- ATX Medium Tower Case w/ 235 Watt Power Supply
- Microsoft Ergonomic PS-2 Mouse
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K6-200 MHz

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- AMD CPU MMX K6-200MHz
- CPU Cooling kit w/ Heatsink & Fan (Ball Bearing)
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- 15" Sampo 511L Digital Color Monitor (1024 x 768) .28 NI
- Keytronic 104 Keys PS-2 Enhanced Keyboard
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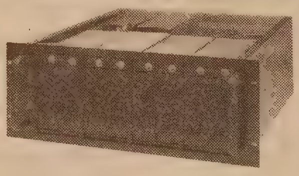

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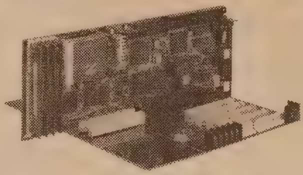

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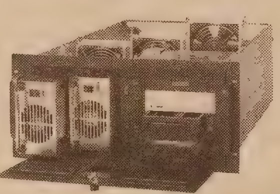

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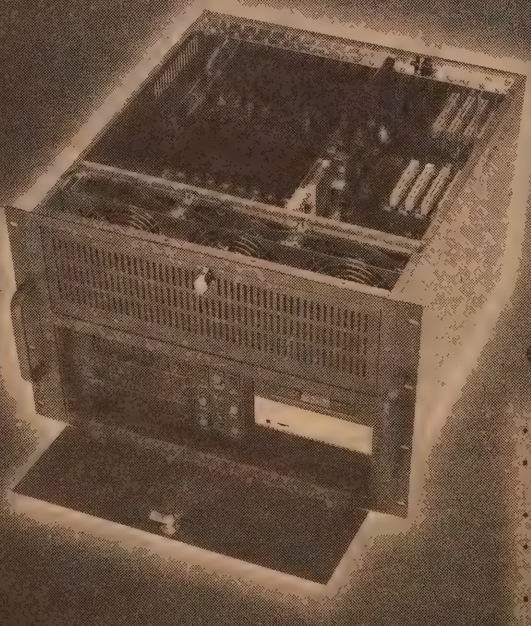

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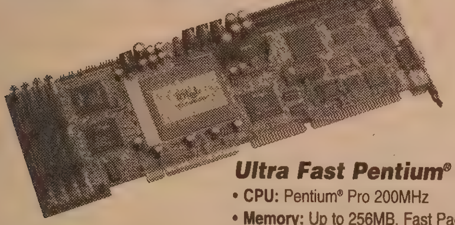

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BMUG • By Peter Linde and Sam Penrose

MacOS 8, Microsoft, And Beyond

Pros and Cons On The Microsoft/Apple Deal And MacOS 8 Install Tips

This month, we'll start with a look at the players in the Microsoft/Apple deal—who came out on top and who might have lost. Then we'll give some tips on how to avoid trouble when installing Apple's new System 8.

Part One: Peter On The Microsoft Deal

Apple and Microsoft sittin' in a tree. K-I-S-S-I-N-G. First comes money, then come patents, then comes......well, nobody knows exactly what will come from the union of Apple and Microsoft.

Are we seeing the beginning of an inexorable slide toward MSApple? Or are we seeing much ado about nothing? And what does it mean for those of us who love our OS just the way it is and do not want to see it melt into Windows?

How much would you pay? Don't answer, because Microsoft also gets access to Apple's patents—oh, I mean Apple and Microsoft will share patents. Since most of us have experienced Microsoft technology, we all know what a bonus this is for Apple, but we'll get to that later.

Does this, in and of itself, mean that the MacOS and Windows will start to look more and more alike? Of course not! I have a news flash for those who have been crying about this possibility: The trend already exists exclusive of any deal between Microsoft and Apple. Examine the development from DOS to Windows 3.11 to Windows 95. One of the biggest selling points of the latest Windows OS is that it is "almost like a Mac."

Is this a tragedy? Of course not! As long as the MacOS sets the standard to which the others (in this case Windows) try to catch up, the proper world order is maintained.

In the days since the announcement that Microsoft had purchased approximately 7% of Apple's stock, I have heard many people pontificating on what this development portends for Apple and the MacOS. Some forecast the death of Apple, while others seem to be nonplussed. One person told me that the joke was on Apple as Gates now ran the world. Another was sure that it was the MacOS users who were being taken for a ride as they would see their beloved OS turn into Windows.

These comments got me thinking about what the joke might be, and who it might be on. Let's look at all the players and see if we can't figure it out.

Of course we'll need to look at Microsoft and Apple. Clearly, users of the MacOS are affected and therefore at risk of finding themselves the butt of the joke. Not even the media are safe from being the dupes.

Gates Is Smart

Let's start with Gates and Microsoft. Could they be the marks here?

Let's look at what Gates gets out of the deal. Well, for one thing, he's already made more than 10% on his money back. Not a bad return for a day's work, and it's likely that the stock will appreciate further. If nothing else happens, he made an insanely great financial investment. I only hope you Mac lovers picked up a few shares when the stock was at 13.

And let's keep in mind, $150 million is pocket change for Microsoft. Gates loses that much each day from construction overruns on his house.

It already seems clear that the joke is not on Microsoft, and we haven't even finished covering the benefits to Gates and Microsoft from this deal. Add to the list the good will that Microsoft gets from the antitrust division of the Justice Department. With a straight face, Gates can now say, "What? How could you ever think that I wanted to monopolize the computer industry? Out of nothing more than my deep sense of fairness, I helped prop up my biggest competitor!"

Let's face it: Gates truly doesn't want Apple to go away. Microsoft makes a whole bunch of money selling Mac software. Mac users are more than twice as likely to pay for, rather than pirate, their software. Even better, Apple has essentially functioned as a free research and development division for Microsoft since 1984. Microsoft gets some of its best ideas from the fruits of Apple's research. If Apple went out of business, Gates might have to spring for some of that research himself.

continued on page 143

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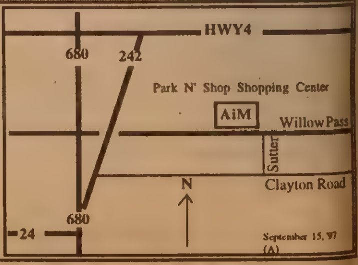

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16MB SDRAM DIM
Diamond 3D 2000 w/ 4MB EDO RAM
PCI EIDE w/IO & 16550 UART
1.2GB EIDE Hard Drive
1.44 TEAC FD
ATX Medium Tower Case
104 Mitsumi KB w/WIN 95 Key
Yamaha MF701 16 bit stereo SC
Toshiba 24X EIDE CD ROM
60W Speakers & Headphones
Microsoft PS2 Mouse & Pad
MGC 15" NI (1280x1024, .28dp)

Pentium® 233MMX $1234
Pentium® 200MMX $1103
Pentium® 166MMX 999
Pentium® 150 949

MMX INTELLIGENT POWER

Asus TX97 w/Intel 430TX chipset MB supports Ultra DMA/33, SDRAM
32 MB SDRAM
Matrox Mystique 220 w/ 4 MB
3.2 GB Quantum Ultra Eide
1.44 TEAC FD
ATX Medium Tower Case
104 Keytronics KB w/ WIN 95 Key
MGC 1785 17" monitor
Creative Labs AWE 64 SC
Toshiba 24x EIDE CDROM
33.6 US Robotics Fax modem w/voice
60W Speakers w/Headphones
Microsoft PS2 Mouse & Pad

Pentium® 233MMX 1810
Pentium® 200MMX 1680
Pentium® 166MMX 1576
AMD K6 233 1748
AMD K6 200 1674
AMDK6 166 1587

SMART AN430TX SYSTEM

Intel Anchorage AN430TX chipset w/512K MB, supports Ultra DMA,
32MB SDRAM DIM.
Matrox Millenium II w/4MB
PCI EIDE w/IO & 16550 UART
3.2 GB Quantum Ultra Eide
1.44 TEAC FD
ATX Medium Tower Case
104 Keytronics KB w/ WIN 95 Key
Sony 200SF 17" .25DP Monitor
Yamaha OPL4 16 Bit SC
Toshiba 16x EIDE CD ROM
33.6 US Robotics Fax modem w/voice
60W Speakers w/Headphones
Microsoft PS2 Mouse & Pad

Pentium® 233MMX $1984
Pentium® 200MMX 1853
Pentium® 166MMX 1749
Pentium® 150 1699

SPECIAL PENTIUM PRO SYSTEMS

Intel VS 440FX Venus MB
Intel CPU w/256K cache & fan
32MB RAM (EDO 60ns)
Matrox Mystique 220 w/ 2MB SG Ram
2.1 GB EIDE HD
1.44 TEAC FD
ATX Medium Tower Case
104 Mitsumi KB w/ WIN 95 Key
Microsoft PS Mouse & Pad
MGC 15" NI (1280x1024, .28dp)
SoundBlaster 32PnP &60W
Toshiba 24X EIDE CD Rom

Pentium Pro® 200 **$1447**

PENTIUM II POWER

Intel Portland PD440FX MB w/Yamhaha OPL3-SA audio
Intel CPU w/256K cache & fan
32MB RAM (EDO 60ns)
Matrox Mystique 220 w/2MB
4.3 GB W.D. EIDE HD
1.44 TEAC FD
ATX Medium Tower Case
Keytronics PS2 keyboard
Microsoft PS Mouse & Pad
MGC 1785 17" Monitor
US Robotics 33.6 Faxmodem w/ voice
60W speakers & headphones
Toshiba 24X EIDE CD Rom

Pentium II® 266 $2149
Pentium II® 233 2013

NOTEBOOKS

TOSHIBA

***Satellite Pro 440CDT:**
133Mhz MMX, 1.34GB, 10X, 16MB Edo, 12.1" TFT, 28.8Fax
$2889

*** Satellite Pro 460CDT:**
166Mhz MMX, 2.0GB, 10X, 32MB Edo, 12.1" TFT, 28.8 FaX
$3750

*** Tecra 510CDT:**
133Mhz, 2.02GB, 10X, 10X, 16MB EDO, 12.1", 28.8FaxModem
$3080

***Tecra 730XCDT:**
150MHZ MMX, 2.02GB, 10X, 16MB EDO, 12.1" TFT, 28.8 FaxModem
$3912

IBM

***ThinkPad 760XL**
166MMX, 16MB, 2.1GB, 12.1" TFT
$3790

***ThinkPad 380D**
150MMX, 16MB, 2.1GB, 12.1" TFT
$3224

***ThinkPad 560E**
166MMx, 16MB, 2.1GB, 12.1" TFT
$4160

MULTIMEDIA

❖CREATIVE LABS	
SoundBlaster AWE64 Gold Oem	170
SoundBlaster AWE64 GOLD Ret	180
SoundBlaster AWE64 oem	82
❖ TOSHIBA	
16X EIDE /24X EIDE	89/94
12X SCSI/15X SCSI	120/150
❖ MITSUMI	
8X /16X EIDE	70/89
❖ CD Writer	
Yamaha 4X6 Int OEM SCSI	579
Phillips 2X6 Int Retail SCSI	365
Mitsumi 2X6 Int. Retail IDE	360
❖ DVD	
Creative Labs PC-DVD	435
Toshiba DVD kit	415

FAX MODEMS

❖SUPRA	
33.6 Faxmodem V.34/Voice Int	67
56K Int w/voice oem /retail	120/130
❖US ROBOTICS Sportster	
28.8 V.32 w/voice Int /Ext	50/70
33.6 w/voice Int. oem	99
33.6 w/voice&Spkphne Int/Ext	160/175
56K Int. vo oem / 56K Ext Ret	150/199
56K w/voice Int./Ext Ret	199/220

KEYBOARDS

Mitsumi 104 w/win95 key	15
Maxiswitch/Keytronics	20/23
Focus 2001/7000	28/45
Focus 8000/9000	33/45
Lite-on Touch Pad	50
Microsoft Natural OEM w/s	55

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MB & CPU'S

Portland MB+Pentium II 266Mhz/audio	$925
Portland MB+Pentium II 233Mhz/audio	$788
Providence Dual Pentium Pro 200 256K	$1429
Venus MB+Pentium Pro 200Mhz/256K	$595
Anchorage/512k+Pentium233MMX	$565
Anchorage/512k+Pentium200MMX	$429
Anchorage/512k+Pentium166MMX	$320
Anchorage/512k+Pentium 150Mhz	$269
Lonetree MB/512k+Pentium233MMX	$553
Lonetree MB/512k+Pentium200MMX	$417
Lonetree MB/512k+Pentium166MMX	$309
Lonetree MB/512k+Pentium150Mhz	$257
Marl MB/512k+Pentium 233MMX	$492
Marl MB/512k+Pentium 200MMX	$356
Marl MB/512k + Pentium 166MMX	$248
Marl MB/512k+Pentium 150Mhz	$196
Asus P55T2P4/512K + Pentium 233MMX	$520
Asus P55T2P4/512K + Pentium 200MMX	$384
Asus 97TX/512k + AMD K6 233MMX	$490
Asus 97TX/512k + AMD K6 200MMX	$403
Asus 97TX/512k + AMD K6 166MMX	$315

VIDEO CARDS

❖TRIDENT	
512k/ 1MB ISA/1MB PCI	24/33/30
❖DIAMOND	
Stealth 64 Video 2MB VR	90
Stealth 64 Video 4MB VR	116
Stealth 3-D 2mb/4mb EDO	60/83
Monster 3-D w/4mb Dram	155
3D 3000 2MB/4MB VR	110/150
FIRE GL 1000 w/4mb/8mb	130/170
❖SPIDER	
Tarantula 64 MK II 2MB VR	50
Tarantula 3-D 4MB EDO	50
❖MATROX	
Millenium II 4MB WR oe/re	170/185
Millenium II 8MB WR oe/re	230/265
Mystique 220 2MB oem/ret	102/108
Mystique 220 4MB oem/ret	119/130
Mystique Rainbow Runner ret	190
❖ATI	
3D ProturboPC2TV 4MB/8MB	140/180
3-DXPR+PC2TV2MB/4MB	90/108
All-In-Wonder 2MB/4MB	195/210
❖#9	
Imagine 128 4MB VR SER. 2	320
Imagine 128 8MB VR SER. 2	475

MONITORS

❖NANAO	
EIZO FX-B5/TX-C7S	489/958
TX-D7S(20")	1620
EIZO FX-C5/FX-C6	697/780
FX-E7 / FX-E8	1620/2153
❖NEC	
P750(17".25dp)/M700	815/735
E500/E700	370/645
E1100(21")/P1150(21")	1335/1465
❖MAG	
510V2 / 710V2	268/470
DJ530 / DJ700	292/530
DX15T / DX700T (.25DP)	325/606
DJ702 / DJ702E	535/505
Princeton EO 50 / EO70	259/440
Princeton Ultra 20	950
❖SONY	
100SX / 17SE2 T	329/827
100SF / 300SFT(20")	345/1344
200SF/200SX	649/598
20SE2T	1739
❖HITACHI	
CM500U/CM620U	312/525
CM800U(20")/CM-2011(20"	1360/1128
CM-701 / CM802U	1360/1617
❖VIEWSONIC	
E641 (14") /P815	211/1505
P815(21")/ E655	1503/283
15GS/15GA	339/373
17GA/.G771	590/540
17PS/17EA	648/536
G800 / G810	1,015/1262
GT770/GT800(20")	617/1127
PT770/PT 813	658/1448
❖NOKIA	
449XA 15"/447XI	364/720
447L/445XI (21")	593/1513
❖IIYAMA	
MT-9017E/MF-8617E	630/560
❖MGC	
NI 14" Monitor 0.28	160
NI 15" .28 Digital Control	225
NI 17" Monitor 0.26	440
NI 1785 1600X1200 0.26	480
❖COLORADO	
T-3000 3.2GB/T4000 8GB	175/343
Iomega Zip 100 IDE Int. bulk	105
Iomega Zip 100 Par/SCSI	140/150
Iomega Jazz 1.0GB SCSI Int.	285
Iomega Jazz 1.0GB SCSI Ext	375
Seagate TapeStore 800mb int	75
❖TEAC	
Floppy Drive 1.2/1.44	39/23
OR-technology LS-120	147

HARD DRIVES

❖FUJITSU	
1.2 GB EIDE(M1636TAU)	142
1.7 GB EIDE(M1623TAU)	155
2.5 GB EIDE(M1638TAU)	190
❖QUANTUM	
2.1 GB EIDE(ST32160A)	188
3.2 GB EIDE(ST33240A)	225
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2.1 GB UL SCSI(ST32160S)	230
3.2 GB UL SCSI(ST33260S)	302
❖WESTERN DIGITAL	
1.6 GB EIDE(AC21600A)	172
2.0 GB EIDE(AC22000)	190
2.5 GB EIDE(AC22500)	207
3.1 GB EIDE(AC33100)	219
4.3 GB EIDE(AC34300)	270
4.3GB UW SCSI (E4360-007)	620
4.3GB UL SCSI (E4360-003)	600
❖SEAGATE	
2.1 GB EIDE(ST32122A)	178
2.5 GB EIDE(ST32520A)	199
2.1GB UL SCSI (ST32272N)	430
2.1GB UW SCSI (ST32272W)	470
❖MAXTOR	
5.1 GB EIDE(MXT85120A)	317
❖IBM	
2.1GB UW SCSI (AS32160W)	290
4.3GB UW SCSI (AS34330W)	405

CONTROLLERS

❖ADAPTEC	
Adap. PCI 2940U OEM w/SW	180
Adap. PCI 2940UWw/SWOEM	194
Adap. PCI 3940 w/Drivers	295
Adap. PCI 3940U w/Drivers	305
Adap. PCI 3940W w/Drivers	335

CASES

Baby AT Case w/ 230W	43
Mini Tower case w/230W	34
Medium Tower case 230W	48
ATX Desktop case	68
ATX Medium case	73
ATX Full Tower case	99

SOFTWARE

MS Win NT 4.0 WS w/sys	145
MS Win NT 4.0 Server w/sys	450
Office Standard Win 97 w/sys	155
Office Pro for Win 97 w/sys	195

MICE

MS mouse serial/bus w/sys	23/48
MS IntelliMouse w/sys	37
Logitech Mouseman/Trackman	23/40
Logitech Marble Trackman	50

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Intel Motherboard
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MOTHERBOARD/CPU
$988/$828

266/233
Microstar Motherboard
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MOTHERBOARD/CPU
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DUAL PENTIUM® PRO
200/180
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MICROSTAR
MOTHERBOARD
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PCI
TRITON CHIPSET
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MOTHERBOARD/CPU
$258/$378/$488

AMD 75/100/133/166MHz
PCI
TRITON CHIPSET
256K PIPED BURST CACHE
$288/$298/$318/$338
MOTHERBOARD/CPU
$148/$158/$178/$198

BASIC SYSTEM CONFIGURATION

- 8MB RAM Expandable Except Pentium® PRO+16MB
- IDE 2FD/4HD Controller
- 101 Key Keytronic Keyboard
- Teac 1.44MB Floppy Drive
- 1 Parallel, 2 Serial Ports
- Mini Tower Case (Pentium® Pro, Tucson®, & MARL® Uses ATX Mid Tower Case)
- Power Supply
- One Year Warranty

LIFETIME LABOR WARRANTY ON SYSTEM!

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w/ 16X SPEED CD ROM

PACKAGE INCLUDES:
- Motherboard w/512K Cache
- 16 MB RAM
- 1.2GB Hard Drive (Fujitsu)
- Mini Tower Case
- 16X IDE CD-ROM (Cyber)
- Sound Blaster 16 OEM Soundcard
- Teac 1.44MB Floppy Drive
- 14" SVGA 1024x768 .28mm NI Color Monitor
- SVGA Card w/1MB (Trident Chipset)
- IDE Enhanced Controller (2S/1P/1G)
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- Microsoft Compatible Mouse
- Windows 95 Software

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Peripherals

VIDEO CARDS

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ATI 3D Xpression+ 4MB DRAM PC2TV	159
ATI 3D Pro 4MB OEM/Retail	159/199
Diamond Stealth 64 2MB VRAM PCI	95
2MB Upgrade For Above	69
Diamond Stealth 64 1/2MB DRAM PCI	55/71
Diamond 3D Monster 4MB PCI Ret./OEM	189/159
Diamond 3D 2MB/4MB DRAM	75/99
Diamond 3D 3000 2/4 MB VRAM	139/179
Matrox Millennium II 1600x1200	
4MB WRAM PCI	195
8MB WRAM PCI	295
4MB WRAM Upgrade	125
8MB WRAM Upgrade	195
12MB WRAM Upgrade	285
Matrox Mystique 220 2/4MB (Retail)	109/145
Matrox Mystique Rainbow Runner	239
Matrox Mystique 2 MB Upgrade	59
Trident PCI 1MB (64 Bit MPEG)	49
VGA (1024x768) 1MB ISA	49

DRIVE CONTROLLERS

IDE Controller	$17
Enhanced IDE VLB 2S/1P	29
KW557 IDE ISA 2S/1P	39
Adaptec 1522A	85
Adaptec SCSI 1542C OEM/w/software	175/239
Adaptec 2940 SCSI PCI (Bus Mastering)	189
Adaptec 2940 ULTRA SCSI PCI	199
Adaptec 2940UW Ultra Wide SCSI	235
Adaptec 3940 PCI Multi-Channel	399
8 Bit SCSI Card	49
Promise EIDE 2300 Plus 4HD/2S (16550)/1P	49
Promise EIDE MAX IDE	32

I/O CARDS

AT I/O (2S 16550/1P/1G) Hi-Speed	$39
AT-I/O (2S/1P/1G)	15
Printer Card	12

KEYBOARDS

Microsoft Natural Keyboard	$65
Keytronic 101 Win 95	29
MAXISWITCH 101 Keyboard	29

MONITORS

Iiyama (IDEK)	
MF8617E 17" .26	$565
MF9017E 17" .25	665
MF8221E 21" .22	1315
MF9021E 21" .3	1355
MF8721 21" 1800X1440	1425
NANAO	
FX-C5 17"	759
FX-C6 17" .27, 1280X1024	859
TX-C7S 17" .25, 1600X1200	1025
TX-D7S 20" .25, 1600X1200	1759
FX-2 21" .26, 1600X1280	2865
VIEWSONIC	
P810 21" 1600x1280 .26	1445
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G771 17" 1280x1024 .27NI	595
15GS 15" 1280x1024 NI	339
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CPD 100SF	395
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CPD300SF 20"	1455
ART MEDIA (Sony OEM) TX1864 17"	615
NOKIA	
447L (17") 1024x1024 .28	615
447X	929
445Xi (21") 1600x1280	1755
MAG DX1795 17" 1280x1024 .26	595

MODEMS & FAX/MODEMS

Megahertz PCMCIA FaxModem (28.8/14.4)	235
US Robotics Sportster	
33.6 Fax Modem Int w/Speaker Phone/ Voice Mail (Item #1171) Reg./OEM	159/119
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56K Fax/Modem Int./Ext.	179/199
56K Fax/Modem w/Voice Int./Ext.	199/219
56K Fax/Modem w/Voice (OEM)	179
SupraExpress	
33.6 Fax/Modem w/ Voice Mail Int.	69
56K Fax/Modem	119

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C1534 4mm DAT 2GB SCSI INT	$549
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4GB T4000 SCSI TRAVAN INT	375
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IOMEGA ZIP Drive 100MB SCSI	149
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Ditto 800MB Int/Ext	109/139
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Ethernet Combo PCI	39
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3 COM	
3C509 TP/OEM/Reg	59/118
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3C900TP OEM/REG	89/115
3C905TX (100MB) PCI TP/OEM/Single	79/109
Intel EtherExpress Pro (100MB) PILA 8465B Single/5Pack	$69/425
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ATX Full Tower Case	115
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POINTING DEVICES

PC Joystick	$16
Logitech 2-button PS/2 Mouse	19
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Logitech Bus Mouseman	64
Logitech Mouseman Combo/OEM	49/29
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Mouse (Serial 9 Pin)	9
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•CYBER 16X IDE CD-ROM INTERNAL	79
•TOSHIBA XM5701 SCSI 12X INTERNAL	129
•TOSHIBA 15X SCSI CD-ROM INTERNAL	149
•TOSHIBA 16X IDE CD-ROM INTERNAL	95
•TEAC 24X IDE CD-ROM INTERNAL	109
•RICOH MP6200-S 6X2 CD-RECORDER INTERNAL	539
•MICROPHONE	9⁹⁹

Multimedia Products

•SOUND BLASTER AWE 64 Gold	$195
•SOUND BLASTER AWE 64 Retail/OEM	185/95
•SOUND BLASTER 32 WAVE TABLE (OEM)	85
•SOUND BLASTER PRO 16 BASIC IDE (OEM)	59
•ACER 16-bit Sound Card	39
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Lithium Ion Battery	+125

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- Supports Intel Pentium MMX Technology
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- 1.44MB Floppy Drive
- 1.3GB Hard Drive
- 2MB Video Display
- 128-bit Graphic Chipset
- Lithium Ion Battery Option
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* AVAILABILITY OF NOTEBOOKS IS SUBJECT TO AVAILABILITY OF CPUs

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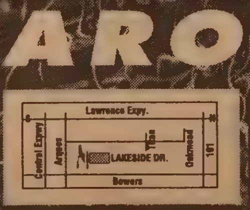

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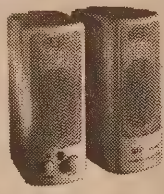

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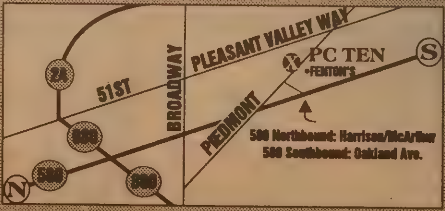

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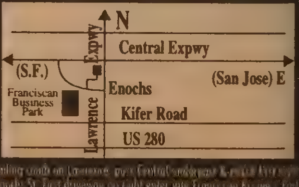

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Last but not least, if Rhapsody comes out on time, and it does turn out to be the NT killer that we hope it will be, then lo and behold, Gates already owns some of it.

In the grand scheme of things, Gates invested the money he found in his pockets before doing laundry one day, and instantly made even more money. The joke is certainly not on Gates nor Microsoft.

Apple Does What It Needs To

Now let's look at Apple. Has Apple signed its own death warrant? Is the company that once flew a Jolly Roger above its headquarters now just another jewel in the Microsoft acquisition crown? Surely the joke must be on Apple, right? Nope.

Apple makes out in this deal too, but not from the money. $150 million is pocket change. If you are Apple, you can lose that much in a quarter and most people will consider that a pretty good showing.

Apple gets two main benefits from this deal. First, and foremost, they get a commitment from Microsoft for five more years of software development. The value of this promise cannot be overestimated. Microsoft sells more software for the Mac than any other company does. Many corporate IS managers have been reluctant to buy Macs because they feared the (mostly media fed) rumors that Microsoft might stop making software for the Mac. The best rumor had Gates saying that Mac users would have to run Office for Windows within Connectix Corporation's VirtualPC emulation software.

Most corporate Mac patrons breathed a heavy sigh of relief upon hearing the announcement. It meant that the pace at which Macs had been being "transitioned" out of companies would slow. Five years is a long time in the computer world. It's plenty of time to allow for continued investment in new machines and software.

It's also important to note that with this deal, Apple and Microsoft have settled their internecine patent disputes. Considering that Microsoft will be giving an "undisclosed" sum for access and use of Apple patents, it seems likely that Apple will get a nice chunk of change. Without making a formal plea of guilty to massive patent infringements, Microsoft is tacitly admitting what everyone has known all along: They have gotten most of their best ideas from Apple. This won't change, but at least Apple will be compensated. And how bad can it be for Apple if core Apple technologies become standard on the Wintel side (as has happened with QuickTime)?

But the main benefit to Apple in this whole deal is the "cred" that comes from having Bill Gates" invest in Apple's future. Apple is on the exact same course it has been on for months, yet somehow, just having the Microsoft Seal of Approval doubled the price of the stock overnight.

Those who believed the hype that Apple was rudderless and going down the tubes (which hasn't been true for at least six months!) now find themselves hypnotically swayed by the mysterious Gates-ray. I think the logic goes something like this: "Yesterday, I thought Apple was going out of business. But today, Bill Gates invested in Apple. He's a really smart guy. I guess Apple must be a really great company with great technology if Bill Gates thinks so."

It's also important to note that with this deal, Apple and Microsoft have settled their internecine patent disputes.

At least the press will stop referring to Apple as "beleaguered." If Apple got nothing else out of the deal, it would have been worth it just for this.

Oh sure, Apple has to call Internet Explorer the "default browser," but what does that mean on a Mac anyway? And for those who think that Microsoft's ownership will translate into control and the "Windows-fication" (you heard it here first) of the MacOS, just keep in mind that Apple created a special class of stock for Microsoft that does not include voting rights.

So, Apple, gets some walkin' around money, a huge jump in its beleaguered stock price, a whole lot of credibility in the business market, and a commitment from the biggest supplier of Mac software to continue producing that software. It certainly seems as though the joke is not on Apple.

Users Win, Too

If the two companies aren't the butt of this joke, then it must be the users, right? Not really. MacOS users, at least for the foreseeable future, come out ahead as well. As we already noted, the announcement slows, and may even stop, the hemorrhagic pace at which Macs were being forced out of many large companies.

As far as MacOS users are concerned, the agreement is probably more notable for what it doesn't do than what it does. It doesn't give Microsoft a controlling interest in Apple. It doesn't alter Apple's OS strategy. It doesn't mean the Mac will soon look just like Windows 95. These are all good things.

So what's wrong with this deal? Well, the only real problem with this deal is that it perpetuates a world in which Microsoft owns absolutely everything. Even if Microsoft made insanely great products, an assertion from which even the most ardent fans of their products shy away, this would not be the best deal for computer users of either platform. When one company dominates so completely, competition and innovation suffer. This leads to lower quality hardware and software, and it's the users who end up paying the price. In a sense, the biggest problem with this deal is that it fails to significantly alter the status quo.

In the short run, MacOS users are assured that there will be a Mac to feel superior about using, but in the long run, we may all sport Microsoft tattoos. Nonetheless, the joke isn't on the users of the MacOS because something needed to be done, and this was probably the one thing that would work.

Who's Left?

So who's left? Well, there's Steve Jobs. Here's a guy who has every right to gloat about everything that's gone on. He founded Apple only to be kicked out on his ear. He started two other successful companies and then got to come back to Apple as the *real* Savior (after that false prophet got the boot).

But even after he came back, he lost faith that Apple would ever turn around and sold his 1.5 million shares that he got when Apple acquired NeXT. He sold them at 15. Shortly after the deal that he personally brokered with Bill Gates was announced, Apple's stock shot to almost 30. This cost him about 16 million dollars. I'd say there's a touch of whimsy in that. Sure, he's richer than just about anyone could hope to be, but.... ouch!

But more than anyone else, even more than the sadder-but-richer Jobs, the joke is on the media. For the last couple of years, the media have bashed Apple up one side and down the

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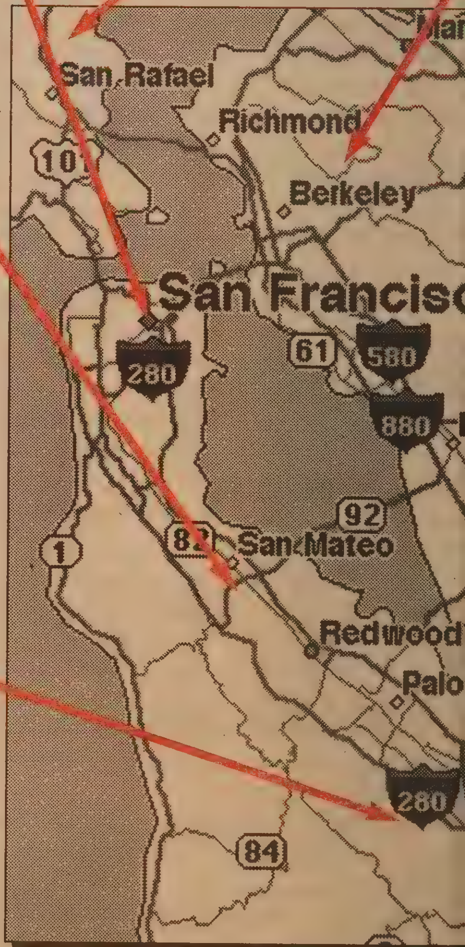

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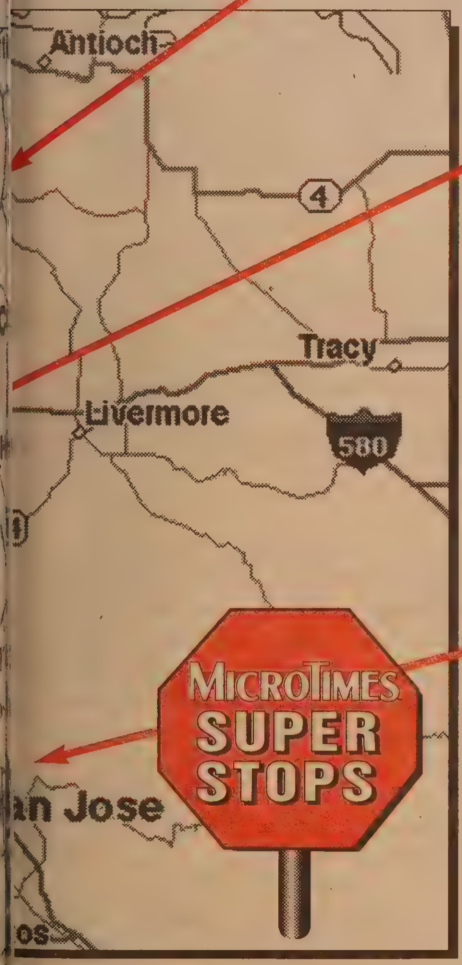

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other. It seemed like the *San Jose Mercury News* and the *San Francisco Chronicle* believed Apple had changed the company's name to "Beleaguered Apple ®". Many responsible news organizations, such as *The New York Times* and *The Wall Street Journal*, printed stories that contained inaccuracies. Others just wrote huge headlines predicting doom and gloom.

It is certainly true that Apple has had its share of problems over the last few years. Think about how much ink was spilled talking about "exploding PowerBooks" when the 5300s came out. In truth, only two 5300 batteries ever failed, and both of them failed while being heat-stress tested by Apple. Add to this the fact that Apple didn't even make the batteries. Yet the reports made it sound like buying a 5300 was like buying your very own personal landmine.

Precious little has been said in the press about Apple's new PowerBooks. The 3400 is the fastest laptop in the world. It is also one of the most tested products ever created by Apple. Anyone who has used one will tell you that it is nothing less than a pleasure to operate. Where are the articles about Apple's return to laptop supremacy? For the most part, they haven't been written. At least not yet. Expect to start seeing more favorable press about Apple in the coming months. You'll start to see that, paraphrasing Mark Twain, reports of Apple's demise have been greatly exaggerated.

Why should you expect the press to start viewing Apple in a more favorable light? It certainly doesn't have anything to do with Apple's performance. Nothing in this deal changes the course of any current Apple strategy. Yet, suddenly the press is "re-appraising" Apple and finding out that a lot of cool stuff is happening. Expect to start reading more articles about cool products and cool software coming out on time and as promised.

You can avoid being the butt of jokes if you take a few steps to insure smooth installation of you system software as described by Sam Penrose in Part Two of the BMUG Column.

Part Two: Sam On Upgrading Your Operating System

With the recent release of MacOS 8 and a slew of major operating system overhauls for Apple hardware due in the next year, this seems like a good time to review the basics of installing OS upgrades.

Your Mac is a unique, complicated assembly of hundreds of different hardware and software components. At the heart of the assembly is the system software, consisting of a base OS with dozens of individual components, settings and modifications all interacting with each other and your hardware. These components have a tendency to step on each other's toes. Most modern Macs are not fully stable and functional without at least a little troubleshooting.

By upgrading your OS you can improve the core of your computing experience, but only by entering into a new round of troubleshooting. The extent of this effort is never certain. No one understands every little detail and self-interaction of their system, which means that you never know when a simple two-hour upgrade is going to turn into a twenty-hour nightmare.

To 8 Or Not To 8?

If you have some time and are willing to risk a slight chance of spending a lot of time, the next questions are whether an upgrade will be possible, feasible, or cost-effective.

If your machine is based around anything less than a 68040 processor, it won't run anything later than 7.6 and might be happier with 7.1. Macs based on the 68040 seem to do well with MacOS 8 if they have enough RAM and drive space, but many owners will not bother. With most '040s worth less than $500 and unable to take advantage of many PowerPC-specific features of MacOS 8 and later, the $100 upgrade may not be cost-effective.

In the "MacOS Install" application's second screen, where you select the disk onto which you are installing, there is a little box marked "Perform Clean Installation." ***Be sure to click on it before continuing.***

If you have an older, slower PowerPC-based Mac, you probably want to upgrade. The best argument for MacOS 8 is MacOS 7.5.x, a crash-prone mess. 7.6 and 8 are faster, cleaner, and more stable, with MacOS 8 being a substantial, feature-rich overhaul. If you are already running 7.6, you may wish to consider whether the upgrade to 8 would be as helpful as an extra 16MB of RAM, which you can get for about the same price.

If your PowerMac is running a "current" processor (180+ MHz 603e or any 604 or 604e), you will definitely enjoy 8, and you will reportedly be able to take advantage of Rhapsody when it arrives next year. With its real-world benefits and requirements unclear until well into 1998, Rhapsody does not provide a good argument for skipping the upgrade to 8, particularly from anything earlier than 7.6.

Installation Basics

Before you install a new OS, back up your data. A small fraction of OS installations result in unreadable hard drives. Of course, you should be backing up regularly anyway, so hopefully this will not be much work. It's a good idea to keep a second bootable drive around. An external hard drive or removable drive can keep you working at the same time it saves your data in the case of a serious problem with your main drive.

After backing up your data, consider your hard drive. The MacOS 8 installer will automatically check its health and offer to update its drivers if necessary. If you are using a third-party driver, find out what version the manufacturer recommends. (At this writing, there are serious incompatibilities between OS 8 and version 5.8 of LaCie's Silverlining. A fix is pending.)

Since you are doing all this maintenance anyway, you may wish to take the time to tidy up your drive. Before upgrading to 8, I cleaned dozens of megabytes of junk from my internal drive, reworked a folder structure that had grown unwieldy, and moved everything over to an external. I was especially careful to save the important data my Mac buries in its system folder, mainly Internet-related stuff like Eudora mailboxes, Internet Explorer favorites, and all my TCP/IP and PPP settings. I recommend writing the latter down on an actual piece of paper.

Then I erased the drive completely, installed the new OS, and moved my data and applications back over.

Even if you don't go to these lengths, be sure to do a "clean" installation. Clean installations create new system folders while unclean installations merely copy over old ones, potentially causing all sorts of problems. As others have noted, unclean installations are such a bad idea Apple probably shouldn't allow them, let alone

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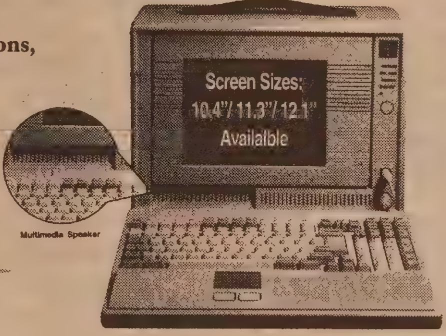

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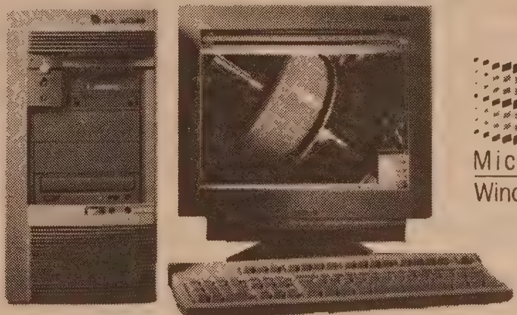

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make them the default. Besides causing harsh software conflicts, installing over an old system folder can wipe out important information buried in preferences files and control panels.

Unfortunately, you have to pay attention to avoid doing one. In the "MacOS Install" application's second screen, where you select the disk onto which you are installing, there is a little box marked "Perform Clean Installation." Be sure to click on it before continuing.

You also want to be careful about names. It has been reported that the OS 8 Installer will replace any folder named "Internet" with its own folder named "Internet." (See why you want to back up before beginning this process?) It has also been reported that if it finds a folder with the same name as a file it wants to install (like "SimpleText"), the Installer will throw its hands up and refuse to continue.

Running The Installer

MacOS 8 comes on a CD. (You can pay extra for floppies if you need them; I'd recommend spending your money on a used CD drive instead.) In order to install 8 on your internal drive you'll need to boot from something else; most likely this will be the CD. You can do so by holding down "C" (or command-option-shift-delete) at start-up or by selecting the MacOS 8 CD in the Startup Disk Control Panel before restarting.

You may find your Mac refusing to complete the startup process. This problem reportedly happens when the OS on the CD, which has AppleTalk on, conflicts with AppleTalk-off settings in the PRAM of the Mac. The easiest workaround is to turn AppleTalk back on before booting from the CD. You can also boot from the CD with extensions off, which requires releasing the C key (or the command-option-shift-delete keys) as the happy Mac appears and immediately holding down the shift key. Zapping your PRAM will also work, since AppleTalk-on is the factory default.

If you are using the standard installer, you first select a drive, remembering to check Perform Clean Installation. Next comes a screen of Important Information. Read it: it's short and informative. Then Apple shows you a licensing agreement, which no one reads but everyone has to agree to. After that, you get the main Installer screen.

The first thing you should consider is the "Options" button. If you have an Apple hard drive, it will update your drivers, an excellent idea assuming you've backed up all your data. If your drive was formatted by third-party software, ignore this button.

The standard Installer offers you check boxes for installing MacOS Runtime for Java, Personal Web Sharing, QuickDraw 3D, OpenDoc, MacLink Plus, Apple Location Manager, CyberDog, QuickDraw GX, Text-to-Speech, and Apple Remote Access. These items are important tools for a few, and toys (or useless) for most. I would advise not installing any of them unless you have a specific purpose for it. The Java engine in particular should be superseded by the time you read this.

If you click Customize, you will get a screen with the items listed above plus four more. Essentially the difference comes down to whether you want a complete set of new Internet software via the "Internet Access" and "Open Transport PPP" boxes. If you have never used the Internet before, this package is a great way to get started. If you are an experienced user, you will probably have everything you want from the "Access" package except for Open Transport 1.2, about which see below. Open Transport PPP should be installed unless you have a recent copy of FreePPP, a third-party alternative whose interface many prefer.

Running the installer took about 30 minutes from the 2x CD-ROM drive on my 7100/66. Have a good book handy.

After the installer burps to announce success, you may want to install items that are not part of the default for your machine. For instance, the Control Strip does not install automatically on desktop computers. To get it, I had to run the Installer buried in Software Installers: System Software: MacOS 8, select "custom," and check "Control Panels." This dumped a few PowerBook-related panels into my system, including Control Strip. If you use the Internet but didn't install the "Access" package, check the "Networking and Connectivity" box in the same screen to get Open Transport 1.2, a significant improvement over previous versions. (Thanks to BMUGer John Malm for this tip.) My final wish was for Hoefler Text, a nice serif font Apple created to show off QuickDraw GX. Since I didn't want to install GX itself, I had to go to the GX installer and do a custom Font installation. Take the time to sift through the OS 8 CD; there are all sorts of goodies.

Cleaning Up

After you finish the installation, you should immediately start cleaning out all the stuff you know you don't want but that the Installer insisted on giving you. Begin with the extensions and control panels in your system folder, which take up not only drive space but, unless disabled, actual RAM. Trash the ones you know you don't want (I will never print from an ImageWriter; my 7100 will never be a PowerBook; etc.). Use the Extensions Manager Control Panel to disable things you don't use often or are unsure about. Casady and Greene's Conflict Catcher or the shareware InformInit can help with this process by identifying individual extensions and control panels if turning on Balloon Help or reading MacOS Help (both accessible via the Finder's Help menu) isn't enough.

You should also open the Memory Control Panel and click the "Use Defaults" button at the bottom. This will raise the size of the disk cache to 1/32 of your installed RAM, giving you an instant performance boost if you had it set much lower. If this leaves you feeling RAM-poor you might want to turn on Virtual Memory, which is much faster and more stable under the new system. Or else call up a RAM vendor and buy some. As of this writing 32MB chips have dropped to $110-$150, depending on type. The average computer owner will get more bang for their buck by adding RAM than by any other purchase, with the possible exception of moving to a 17" or larger monitor.

More Information

The best source for MacOS 8 information is the World Wide Web. Begin by visiting Apple's breaking tips page at *http://macos.*

> *After you finish the installation,* ***you should immediately start cleaning out*** *all the stuff you know you don't want but that the Installer insisted on giving you.*

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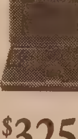

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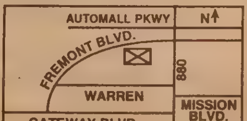

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BMUG *continued...*

apple.com/macos/latebreak/new_information.html . Among other sites, I find MacFixit *(http://www.macfixit.com/)* and Macintouch *(http://www.macintouch.com/m8intro.html)* indispensable. Those interested in underlying technical issues may wish to visit "Apple Developer Technote 1102: MacOS 8" at *http://devworld.apple.com/dev/technotes.shtml* . Finally, in the System Software conference on BMUG's BBSes, dozens of questions about MacOS 8 are answered each week by computer consultants, technical support professionals, and OS 8 beta testers. ■

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What Is BMUG?

BMUG is an educational non-profit computer user group providing know-how, software, and opportunities for 10,000 computer users from countries around the world. We are in the business of giving away information.

BMUG publishes and distributes some of the best computer books and CD-ROMs available. Our semi-annual 400-page "Newsletter," sent to every member, contains scores of articles on every facet of Macintosh computing, the Internet, and more, plus hundreds of megabytes of useful software on the included CD-ROM, all without a single advertisement. Our three BBSes are thriving virtual communities where thousands of people share information about everything from how to defragment a hard drive to how good the latest Emma Thompson movie is, all presented through the friendly FirstClass user interface.

The BBSes also offer access to much of our constantly updated software library. BMUG offers volunteers a broad range of opportunities to learn valuable skills while helping people and having fun. We support over a dozen free Special Interest Groups aimed at everyone from complete beginners to professional programmers, where any member of the public can come to get questions answered. Members can make appointments with our valiant volunteer hardware gurus to get memory installed or mysterious problems examined.

You can learn more about us on our Web page at *http://www.bmug.org* , where you'll find schedules, maps, our guide to the best products for MacOS and general computing, and software and instructions you can use to take a free tour of our Planet BMUG and BMUG Boston BBSes, available by direct dial or over the Internet. Our office at 2055 Center St. in downtown Berkeley is open from 9 am to 5 pm. Come say hello there or at one of our meetings: weekly on the UC Berkeley campus and monthly in San Francisco and San Jose. For more information, call the announcement line at (510)549-2684, ext. 8. You can also fax us at (510)849-9026 or write us at 1442A Walnut St. #62, Berkeley, CA 94709-1496. Join us!

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Online Guide

INTERNET • BY JOHN S. QUARTERMAN

Son Of Spam

The Bogus Samsung Memo Analyzed

Many of you probably got in your email a message with headers like these:

From: Webmaster@compuserve.com
Date: Sat, 09 Aug 97 10:47:22 EST
To: suspected_flamer@somewhereincyberspace.com
Subject: Cease And Desist Flaming
Reply-to: khskllp@aol.com

(For the entire text, see *http://www.mids.org/nospam/hoax.html*)

It claims to be from a law firm representing Samsung, telling people to stop complaining because their client sent spam. A lot of people sent scorchy flames to Samsung and the law firm about this letter.

This goes to show how much people hate spam. It also goes to show how gullible we all can be, because Samsung apparently didn't send or authorize any such letter, nor did the law firm named in it. See for example the *New York Times* writeup (*http://www.nytimes.com/library/cyber/week/081297samsung.html*). And here's a less formal version of the story (*http://www.primenet.com/~awong/writings/samsucks.html*).

This incident gives me a great chance to play George Will and opine on the state of the cyber nation.

What It Says

Let's dissect the content of this message. It warns people to "cease and desist all inflammatory Internet hacking, telephone hacking, flaming, jamming, and other illegal activities." That's the strangest legal terminology I've seen lately. Besides, since when is flaming illegal? In bad taste, often, but illegal? Not to mention that most opponents of spam recommend brief, polite messages of complaint, which are by definition not even flames; see *http://www.mids.org/nospam/* . The letter did provoke some flames, and I'm not surprised.

It gets stranger: "If you have responded aversely to a recent bulk email message from our client, Samsung America, Inc...." A legal warning letter based on speculation?

Free speech doesn't mean you have a right to force people to listen, nor that you have a right to use somebody else's printing presses.

And stranger: "Your email name was provided as being suspected of connection to various acts of Internet terrorism." In how many spam messages have we encountered that phrase "your name was provided"? And would any reputable lawyer send a warning letter based on hearsay?

It alleges legal facts that just aren't true: "as spamming is a protected activity under the laws of free speech." Free speech doesn't mean you have a right to force people to listen, nor that you have a right to use somebody else's printing presses. While some spam, such as pyramid schemes, is of questionable legality, and some of it is quite likely outright fraud, most of it wouldn't cause any comment if it appeared in Web pages like legitimate Internet commerce. Instead spam is sent unsolicited to large numbers of people who did not request it, using large amounts of other people's resources that the spammers did not have permission to use.

But it gets even weirder: "Please consider this as your notice to cease all attempts to harm multi-national corporations who conduct legitimate commerce on the Internet." What does a corporation being multi-national have to do with any of this? The only reason I can think of for that language to be in the letter is if the letter was sent by a spammer and the spammer is so desperate for legitimacy that a comparison to something big and global was included to try to improve spammers' images. It didn't work. It just looks ridiculous.

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Finally, the law firm listed at the end of the message is real, but when contacted denies having sent the message.

Gullibility

Now, I may be more skeptical than most, because I doubted this letter's authenticity from the first time I read it. Some of my reasons are above.

Another is that one of the partners in the law firm is named Kapor, and this letter was sent out just after the supposed spam by Lotus Corp. that turned out to be a targeted letter to a small list of people that went awry. It looked to me like somebody was making a play on the name Kapor, since Mitch Kapor was the founder of Lotus Corp. (He long since left that company on the grounds that it had become too big for any one person to direct; a contention that his old enemy Bill Gates has disproven by example at Microsoft.)

So I called up the telephone number listed in the "legal" letter. The receptionist answered with the same string of names as in the letter, so the law firm itself is real.

The letter, however, is not. A lawyer I know remarked that he looks at legal letters all day, and that one was so obviously bogus that he didn't even bother to comment on it when he first saw it.

Credulity

So why did so many people believe the letter really was authorized by Samsung? Why did so many people believe Lotus Corp. had spammed? Why did so many people believe that Kurt Vonnegut had written the piece about sunscreen and given it as a commencement address this summer at MIT? Okay, that last one caught me, too, although I can claim to have thought the stuff in it about beauty magazines was a little out of character.

In case you haven't heard yet, the sunscreen speech was actually a column published in the *Chicago Tribune (http://www.chicago.tribune.com)* by columnist Mary Schmich, in which she never mentioned Vonnegut once. She asks, "Who first stripped the real name off my column and added a phony one?"

My guess is that it was actually two or three steps:

1. Somebody forwarded her column without attribution, as happens all too often (and not just on the Internet; as an amateur genealogist, I find it is all too common to find a newspaper clipping that has been lovingly preserved with all sorts of interesting information about a relative, but no indication of author, date, or name of newspaper).

2. Somebody else read it, thought "this reads just like Vonnegut; it must be by him," and added the Vonnegut attribution.

3. The second person or yet another decided the piece read like a commencement address, and added a note saying it was. Why MIT? Perhaps culprit #2 was at MIT, and culprit #3 saw an MIT return address and assumed that was the locale of the address.

I know the first two copies of the piece I saw

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were posted from the Boston area, and the Harvard commencement speaker, US Secretary of State Madeleine K. Albright *(http://secretary.state.gov/www/albright/)* was so high-profile because of the tie-in with the fiftieth anniversary of George Marshall's announcement of the Marshall Plan at the same venue (*http://www.oecd.org/about/ms-eng2.htm)* that Harvard wouldn't be plausible. So MIT would be the university in the area with the second-highest name recognition, and the real commencement speaker there (*http://the-tech.mit.edu/V116/N69/annan.69n.html*), U.N. Secretary General Kofi Annan (*http://www.un.org/Overview/SG/sg7bio. html*), didn't get as much press.

Anyway, back to the hoax letter alleged to be from Samsung. Why did people believe it? For the same reasons they believed that Lotus would spam. Because they fear that companies bigger than the average fly-by-night spammer will start spamming. Because people generally don't give big companies much credit for ethics or Internet knowledgeability, and it's all too easy to believe that a big company would fall for spamming as advertising. And, of course, people hate that last idea so much that they are trigger-happy at any indication that it might be happening.

Fortunately, it's not happening, and it looks like it won't.

Anyway, back to the hoax letter alleged to be from Samsung. Why did people believe it? For the same reasons they believed that Lotus would spam. Because they fear that companies bigger than the average fly-by-night spammer will start spamming.

Flaky Spam

Some spam is getting downright weird. Here's a description of a prime example:

"Newest kind of spam in Brazil: Someone sends a message alerting of some AOL4FREE virus and telling that (oh God!) the virus will get into action as soon as you open the message, deleting track 0 or doing something so harmful as that. The guy asks you to forward the mail to every email address you have. Did you ever hear about that? You can include in your next version of your article."

Thanks to Paulo Brito for that one. No, I hadn't heard about that specific scam. I have gotten a spam that offers help with computer

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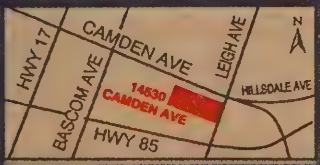

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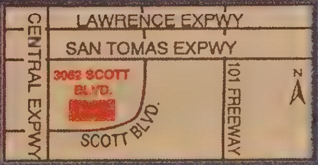

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[illegible]ces and availability subject to change without notice. [illegible] technical problems, which is similar. And religious spam, political spam, sporting spam (own your own NBA team, sure, right), spam offering to sell spots on a list to block spam, and of course much more of the same old Make Money Fast ilk.

Spam Is Still Bad

Lest I leave the impression that spam is just a joke, and that deleting it as it comes in will make it go away, let me reiterate that spam still costs a lot of people a lot of time and money, with no benefit to anyone but the spammers. This is a point that a lot of people still find hard to understand. The costs involved in recipients having to take time to delete or otherwise deal with spam are pretty easy to understand. The costs to ISPs of spam forwarded through their equipment without their permission seem harder to understand.

Here is one puzzled view of ISPs and spammers:

"The difficulty is that we all use lots of different providers facilities with implied permission. To send you this, I go through my own ISP and routers owned by other ISPs, check some site to find out what IP address is associated to onr.com, etc. Nobody tells me whether I have permission—the resources are just there. Who is telling spammers they don't have the same consent I do?"

Ordinary users do not send 10,000 or 10,000,000 identical messages. Spammers do. That is the difference.

Spam still costs a lot of people a lot of time and money, with no benefit to anyone but the spammers. This is a point that a lot of people still find hard to understand.

Ordinary users also normally send mail through their local ISP, not through ISPs unrelated to either the source or destination. Spammers do the latter. That makes it worse.

Spammers aren't just using ISP facilities. Spammers are deliberately abusing them for profit.

In addition, ISPs aren't "just there." They are small businesses, trying to stay in business and make a profit through a lot of hard work. The effect of spammers on them is as if UPS suddenly decided to route all of its trucks through the parking lot of a corner store because it happened to lead to the highway. The parking lot would break down and legitimate customers of the store would be turned away. Spammers don't pay to build the parking lot or to fix it and they don't buy anything in the store. They are thieves and vandals.

We're not talking about a single passenger car cutting through a parking lot here. We're talking a fleet of trucks. The most characteristic aspect of spam is that it is sent in bulk.

It's not like a single shoplifter. It's like a whole herd of bulls let loose through the china shop. They don't buy anything, they just get in the way, break stuff, and leave piles of stinking debris, and they have no business there in the first place.

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Then there's the collateral damage of mailing lists that shut down because nontechnical list administrators can't figure out how to limit access to just list members, and newsgroups that become unusable because there's no way to shut out spam from them? Who wants to shop in a mall that has gotten a reputation for having loose cattle roaming around in it?

People are becoming reluctant to join mailing lists or to post to USENET newsgroups or even to put their electronic mail addresses in their Web pages because spammers have taken to trolling all those places to collect addresses to spam. The unruly stampede is causing people to refuse to be seen on the street in their own network neighborhoods. This is a loss of civility and of basic utility.

Okay, The Good News

The hopeful development is that spam filters are getting more sophisticated, and the great majority of ISPs are employing them.

For example, when we sold Zilker Internet Park (*http://www.zilker.net*) to Jump Point Communications (JPC) (*http://www.jump.net*) a few months ago, the new owners weren't very interested in spam as a topic, nor in the spam filters we had put in place. Like most everybody else, they'd rather concentrate on their business than waste time on a nuisance like spam.

ISPs aren't "just there." They are small businesses, trying to stay in business and make a profit through a lot of hard work. The effect of spammers on them is as if UPS suddenly decided to route all of its trucks through the parking lot of a corner store because it happened to lead to the highway.

But in the last month or so (August 1997) the amount of spam being sent (without permission, in case it's not obvious) through both *zilker.net* and *jump.net* increased so much that the JPC folks were forced to deal with it. In a later column we'll say how they did it. If you want to go ahead and research that and other related solutions, see (*http://www.sendmail.org*). ■

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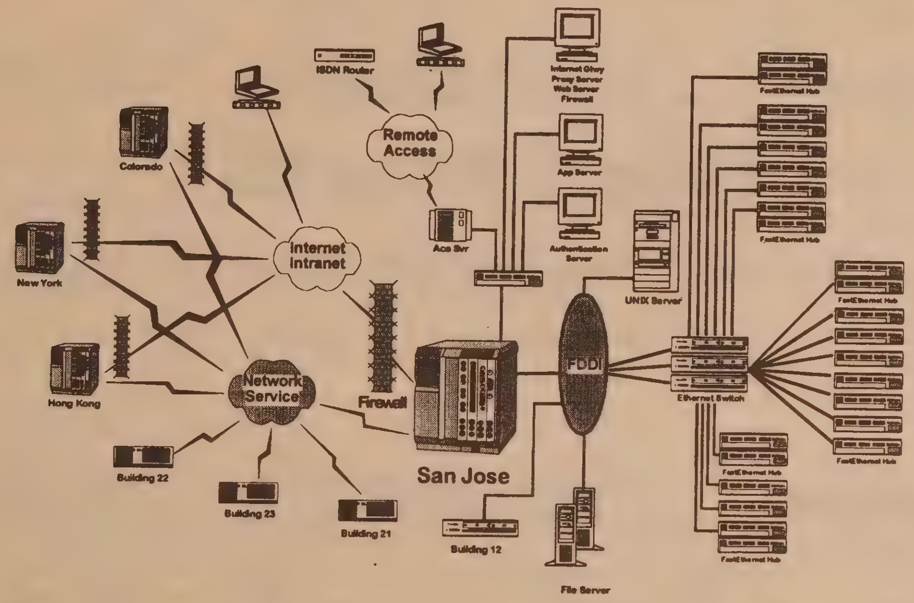

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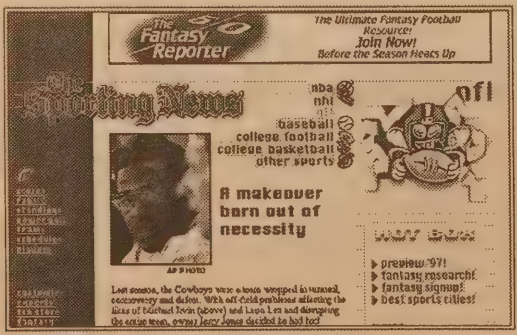
I'm especially grateful after having to suffer through yet another boring summer of (so-called) Major League Baseball where the lowliest-of-low Pittsburgh Pirates actually were competitive in the National League Central. So if you're ready to grab the ole pigskin and smash some face, let's drop back into the pocket and scope the online coverage.

NFL football isn't just a couch potato business anymore. No sir. There's a ton of tight coverage in the secondary from thousands of Fantasy Football Leagues, bar and office pools, plus some serious handicapping and betting—and online equivalents for everyone, from fantasy leagues to offshore betting, expert handicaps, and the software to help you run the unofficial office pool while the boss isn't looking.



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First, there's the general coverage. The top two picks have got to be ESPN SportsZone *(http://ESPN.SportsZone.com/)* and the *Sporting News* online edition *(http://www.sportingnews.com/nfl/).*

ESPN's page is glitzier and has a lot of sports coverage and daily updates. But it comes up more slowly, too, if it's late in the game and you're watching the clock. Plus, if you've ever subscribed to ESPN using a credit card, watch the blind side rush. My own experience was not good. I let my original paid subscription lapse after one year. Then, to my surprise, I find a $39 charge to my credit card from ESPN for an additional year's subscription to that Web site's descriptions and accounts of the NFL without my express written consent.

Apparently, somebody at ESPN SportsZone must have thought that my decision not to beg them for another 12-month weighted schedule was simply an oversight on my part and so some rookie jumped offsides and billed me anyhow. Okay, five yards for encroachment. But, it gets worse, 'cause ESPN's pals at Wells Fargo then played dumb when I challenged the charge pleading habeas consentus. Wells Fargo, pros that they are, still wanted me to supply them with the snail-mail address of ESPN's online billing department so some credit guy from team Wells could send form letters to the accounts receivable geek at team ESPN.

That's when the ref's whistle blew again, this time against Wells Fargo for intentional dropping of the ball. Ten yards. I had no idea what the snail-mail address was, as ESPN is loath to supply one online and I wasn't going to waste my time looking for it on the ESPN Web site. In fact, I pointed out to Wells Fargo, the pros that they are, that they already have the electronic bank info for ESPN and they could contact ESPN billing much easier than this poor second-string scrub.

Anyway, everyone knows it's the easiest thing in the world for a bank to make an electronic transfer, but they try to charge you $10 each time like it's some kind of rocket science. So I guess it's offsetting penalties as the ref (who looks suspiciously like Ralph Nader) throws another flag for roughing the customer.

That said, I like the *Sporting News'* online edition better anyhow, thank you. I feel like I'm actually reading the weekly magazine getting ink on my fingers. The updates, while not daily, keep you posted on your teams. If you need daily doses of pabulum, then consider ESPN, but watch your back.

Fantasy Football

One of the features on ESPN you might want to check out is its Fantasy Football. Ah-ha. You lose. It's too late. The season's already started and you missed the draft. Just think of all of the fun you're missing as you track the performance of your team members vs. the rest of your league. Or imagine your heart-rate pounding as you finally pull the trigger and decide to follow that booze-born hunch to trade Brett Favre for Kordell Stewart. You fool!

Actually there are thousands of these leagues. Some actually give away the prizes they tout. For ESPN, the top prize is to go to Disneyland after they send you to the Super Bowl. Other top prizes include Pentium computers from Hewlett-Packard. So it may be worthwhile to try to remain competitive. If you planned ahead and actually signed up for some Fantasy Football League and got the players you wanted (or not), you can still get the most up-to-date info and stats with which to plot the course and strategy for your team from a whole taxi squad of online resources.

One of the first stops is the the Fantasy Football Report Web site *(http://www.tflreport.com/).* This is the official Web site for the pub-

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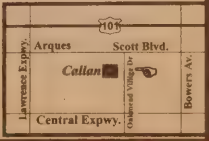

Online Services *continued....*

lishers of those supermarket magazines you consult while the wife is buying bananas.

Fantasy Football Pro ForeCast (http://www.fsnet.com/fsp001a.html) and the *Fantasy Football DraftBook (http://www.fspnet.com/fsp001b.html)* are in fact two of the best-selling Fantasy Football magazines in the country. Fantasy Football Report offers a host of different Fantasy Products designed for the serious desktop coach. Premiums include the August and FlashUpdates. Free materials include the TFL Report with complete access to headlines, features, plus NFL and Fantasy links. TFL Report also offers its Assistant Coach, a free, weekly email update.

The Fantasy Insights Web site *(www.fantasyinsights.com/)* offers a lot of Fantasy intelligence, including draft, preseason, and team-by-team camp reports to help you fill in the blanks before the draft. Also try Mr. Football *(http://mrfootball.com)* that specializes in providing the tools you'll need to win your Fantasy League. Lots of links, articles and Top 20 lists give you valuable slants on the stats.

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High Stakes

If you're more interested in the NFL season from a wagering frame of mind, there's plenty of online action for you, too, online.

First there are the touts and handicappers. Check out Vegas Insider *(http://www.vegasinsider.com)*. A $99 membership gets you 15-minute odds, Matchup Analysis, Expert Picks, Graphical Injury Reports, Expert Columns, Live Scoreboards, Weather Reports, plus the usual odds and ends including late-breaking sports news. Up the ante to a $600 membership and you get a real-time connection to the Vegas betting lines.

Rob Veno's Sports Information Center *(http://www.sportsarbitrage.com/)* offers Odd & Lines by Casino (Stardust, LV Hilton, MGM Grand, Caesar's Future Book and Bally's), current scores, sports headlines, and daily action news. You can get the Premier Selection package for all sports for $289 per month, or an individual sport for $109 per month. Rob Veno warns, "These are not my selections. These moves come from the top Las Vegas betting syndicates, and have been pretty uneventful this year, but nonetheless profitable." If you are someone who isn't interested in the "popular" contests, but only those games where Las Vegas wiseguys are moving large money, find a daily friend with this package.

If that sort of action isn't your cup of tea, there are plenty of other touts at every level. For instance, the come-on at SportsDime *(http://www.sportsdime.com)* is that they teach you how to handicap for anywhere from a $25 to $100 seasonal membership. Joe Dibiase *(http://users.*

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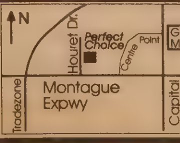

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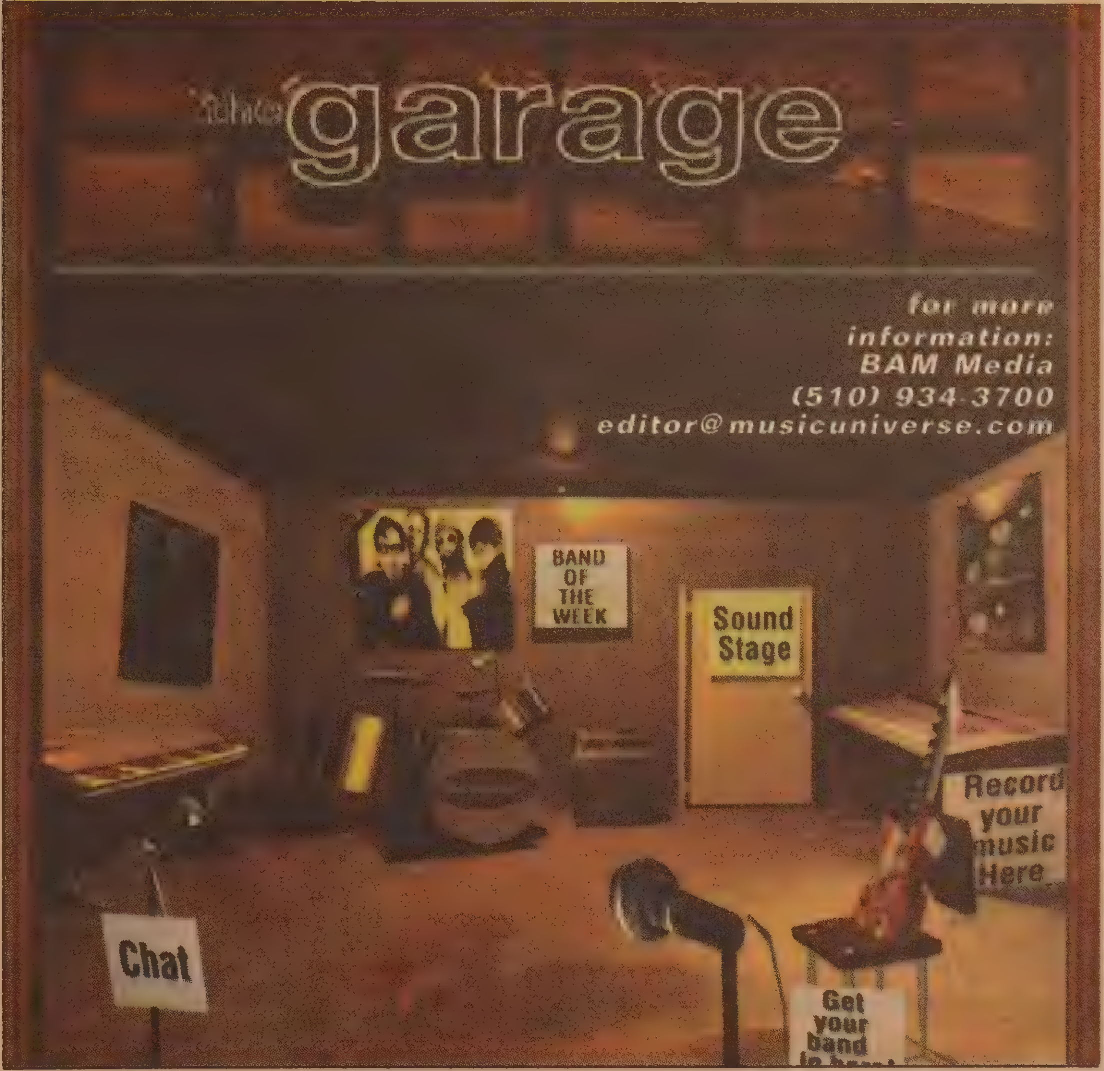

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Online Services *continued....*

icanet.net/~joed/joesnet.htm) will send you his picks each week. Just send him a $50.00 money order at 5301 NW 32nd St., Margate, FL. Also try the Mastermind for free picks at *http://www.masterm.com/nflpicks.html*.

There are more handicappers than fumbles, and one of the best places to shop to find a handicapper that fits your style of wagering is the Totally Football Links site *(http://www.3sports.com)*. This is it. If you are into football and were stranded on a desert island with room for only one bookmark, this would be it—2,232 football links from A-to-Z include: Arena, Canadian, College, Fantasy, Newsgroups, Stadia, Memorabilia, High School, and anon. There is live chat, player and team pages, scouting and draft reports, semi-pro, flag football and World League links as well. More interestingly, they just added a page with links to over 110 online handicappers, six links to handicapping software, and sevemteen places where you can wager the mortgage online.

Another worthy site, Nerd World: Football Links, also has an extensive site for links to topics pigskin *(http://www.nerdworld.com/nw29.html)*.

The Las Vegas Sports Book International *(http://www.lvsbi.com/)* online betting site claims they are located in Santo Domingo in the Dominican Republic. Minimum wager is $50. No max. There are teasers, parlays, straight bets pay 10 to 11. No fees. Winnings from Sunday are paid out the next day from an accounting office in Nassau, Bahamas. And since they aren't in the US they do not report anything about your winnings, except to you. There are sixteen other links to offshore betting at the Totally Football Links site if that doesn't suit you.

Be Your Own Bookie

Finally, if you want to be a bookie and want some software to help you keep track, try out Mr. NFL Software *(www.mrnfl.com)*. MrBookie software should be shipping by now. Handicapping software can also be found at Pro Football Edge *(http://www.pfedge.com/)*. Statsworld *(http://www.statsworld.com/)* helps you keep track of your fantasy teams. Also check out the LeadDog site *(http://www.leaddogstats.com/)* that offers free online stats. O-Pool for Windows, v3.6, *(http://www.wp.com/mortarboard/home.html)* can help you run your office pool and costs just $30. ■

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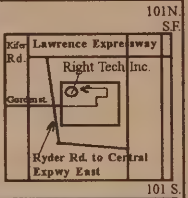

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3C592-TP0 EISA/5-Pack	210/832
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CG1001E02 BayStack 24-pt	982
800 8-pt /2800A 16-pt	195/572
HEWLETT PACKARD AdvStack 8-port/16-port	169/486
AdvanceStack 12-pt/24-pt	455/862
AdvanceStack Switch Module for 12-pt or 24-pt Hub	683
AdvanceStack Management Module	350
AdvanceStack w/Mgmt Module 12-pt/24-pt	533/938

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3Com®

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Through Sep,30, buy a 20 pack of the 3C900-TPO or COMBO PCI 10BaseT card and get a 12 port PS HUB 40 FREE!

Limited time price reduction on the 3C562 LAN+33.6 PCMCIA card. The TokenLink Velocity ISA cards have also been reduced.

CHEYENNE

Through Sep. 30, buy Cheyenne Server Suite 3.0 for NetWare and get Disaster Recovery for NetWare FREE. A $495 value. Server Suite includes ARCserve 25 users, Inoculan, & FaxServe 5 users. Perfect for small workgroups.

The Network Peripherals NuSwitch FE200TT Plus switch allows you to seamlessly connect your existing 10BaseT network to a 100BaseTX network for only $372. The FE200TT features 2 100BaseTX full duplex switch ports for only $232.

Ethernet Switches

3COM SuperStack II Switch 1000 12 10BT,1 100BTX	1,715
SuperStack II Switch 1000 24 10BT, 1 100BTX	2,340
SuperStack II Switch 3000 12-pt 10/100 Switch	2,350
SuperStack II Switch 3000 8-pt 100BTX	2,058
SuperStack II Switch 3000 5-pt 100BFX	6,022
SuperStack II Desktop Switch 24TP,1 100BTX	1,700
OfficeConnect Switch 140 4-10BT,1-100TX	949
ASANTE ReadySwitch 4 RJ45, 1 Fast Ethernet	1,253
BayStack 301 22 10BT, 2 100BTX	2,727
BayStack 302 8-10BT, 1-100BTX	1,772
BayStack 350T 16PT 10/100BaseTX switch	2,723
CISCO CATALYST1900 12 10BTm 1 100BTX	2,008
24 TP,1-100BTX,1-100FX	3,525
CATALYST 1900 24 10BaseT,2-100BTX	3,083
HP AdvanceStack Switch 208 8-10BT,1-100BTX	1,121
AdvanceStack Switch 224 24-10BT, 1-100BTX	2,032
AdvanceStack 2000 6-slot chassis	1,740
AdvanceStack 2000 2 100BTX module 3191A	871
AdvanceStack 2000 4 10BT module J3102A	871
INTEL ES101TX 8 PORT 10/100 Switch	2,191
ES101MATX 2 PORT 10/100 TX module	1,026
NPI Nuswitch FE200TT 2 100BaseTX Full Duplex	232
FE200TT PLUS 2 10/100 Autosensing switched ports	375
FE200TF 1 100BaseTX, 1 ST Full Duplex	528
FE200TF PLUS 1 10/100 TX & 1 10/100 FX	697
FE-210 2-100TX, 10-10BT	1,856
FE-106 1-100TX, 6-10BT	899
FE-512 5-100TX, 12-10BT	4,434
FE-224 2-100TX, 24-10BT	1,306
FE-600 6-100TX Full Duplex	953
FE-600 + 5-100TX, 1 Open slot	1,574
NETGEAR SW510 8 10BT + 2 10/100BaseTX	738
SW518 16 10BT + 2 10/100BaseTX	1,109
FS102 2 10/100 + 2 uplink	252
FS104 4 10/100 + 1 uplink	458
FS508 8 10/100 + 1 uplink	1,223
SMC EZSwitch Plus 6-10BT, 2 100BaseTX	958
TigerSwitch 100, 8 port 10/100BaseTX switch	2,187
TigerSwitch 8+8TX, 8 10BT+8 100BTX switch	1,670

Tape Backup Solutions

CHEYENNE ARCserve v6.0 NLM 10 Users	271
ARCserve v6.0 WRKGRP-Up to 25/Over 25	400/1,156
Changer Option for ARCserve/Push Agent	423/300
Windows NT Agent for ARCserve	330
NetWare Server Suite(Arcserve, Faxserve, Inoculan)	615
Open File Agent for NetWare	426
SEAGATE Backup Exec 1 Server 25 Users	354
Backup Exec Single Server/NetWare Ent NLM	497/1,007
Backup Exec Autoloader Option	432
Backup Director NLM 1 SVR/Multi-Server	727/1,164
Storage Manager Single Server 25 Users	733
Storage Manager Single Server/Multi-Server	1,435/2,538
STAC Replica for NetWare/Multi-Server Option	419/713
EXABYTE EXB-8700LT 8mm 7-14GB drive only	1,060
EXB-8700 8mm 7-14GB w/ Server software	1,406
HP C1554 DDS3 4mm 12-24GB DAT Int/Ext	1,415/1,565
C5647 72-144GB DDS3 autoloader	2,780
C1559 Surestor Ext 72-144GB DDS3 autoloader	3,641
C1536 DDS 4mm 2-4GB DAT Int/Ext	635/785
C1599 DDS2 4mm 4-8GB DAT Int/Ext	840/990
C1553 24-48GB Autoloader Int/Ext	2,230/2,530
SONY SDT-9000 4mm DDS3 24GB Int/Ext	1,418/1,1506
SDT-9000 w/Arcserve Enterprise Int/Ext	2,379/2,432
TECMAR WangDAT 3900 DDS3 12-24 GB DAT Int	1,320
WangDAT 3900 DDS3 12-24 GB DAT Ext	1,440

Remote Access

3COM Office Connect Boundary Router 3C8841	1,247
Office Connect Remote 510 ENET,ISDN	586
Office Connect Remote 520U ENET, ISDN, POTS	733
Office Connect Remote 530U ENET, ISDN, ASYNC	1,100
ARTISOFT InSync Modemshare 1/2/4/8Pt.	108/187/348/592
CISCO 2501 1 ENET, dual serial router (software req)	1,906
2514 2 ENET, dual serial router (software req)	2,340
DIGI LANAserver 2E 2 Async	1,290
LANAserver 6E 4 PCMCIA slots; 2 Async	2,152
LANAserver 8E 8 Async	2,588
LANAserver 10E 8 PCMCIA slots; 2 Async	2,896
EMULEX Connect Plus 2 ports/8 Ports	784/2,417
NOVELL NetWare Connect 2	309
NetWare Connect 8/32 pts	1041/3,405
NetWare Connect 2-port w/Modem and Serial I/O	845
NetWare Connect 8-port w/Modem and Serial I/O	2,912
HEWLETT PACKARD AdvanceStack Dial-A-LAN Modules	
2A/Plus Module and SNMP Bundle J2633A	1,476
4A Module and SNMP Bundle J2634A	1,476
SHIVA Netmodem/E 28.8	871
AccessPort/D Enet ISDN router	690
Lanrover/E Plus w/2 Async ports/4 Async	1,334/3,311
Lanrover/E Plus w/2 v.34/8 PT w/4 v.34	1,771/4,164
Lanrover/E Async 8 Async/8 v.34 modems	3,655/5,355
DIGI INTERNATIONAL Digi 2-Pt/4-Pt/8-Pt	200/455/588
Acceleport 8EM w/RISC CPU, DB25 ISA/PCI	673/673
Paradyne 3150 T-1 Frame Relay CSU	1,157

ISDN Connectivity

3COM Impact IQ 3C882	275
ASCEND NetWarp 128 ISA Terminal Adapter	174
NetWarp Pro w/ POTS port	282
Pileline 15 w/ 2 POTS ports NT1	325
Pipeline 25-FX Bridging/ IP or IPX	480/721
Pipeline 50 w/NT1, COMP, IPX,IP	634
Pipeline 75 Multi w/NT1, COMP, IPX, IP, 2 Analog	703
Pipeline 130 w/FT1,T1,ISDN	1,386
Pipeline 130 ISDN & L56/SW & L56	1,342/1,412
Max 200 Plus w/4 BRI Cards	3,043
CISCO 762 ISDN Rtr/Cisco 766 w/2 Analog Pts	544/668
Cisco 772 4-10BT/Cisco 776 4-10BT, 2 Analog	668/794
Small Office/Home Office Sw 4 users, COMP, IP, IPX	134
Remote Office Sw 1500 users, COMP, IP, IPX	251
SHIVA Lanrover/E Plus 1-BRI ST, v.34, 3 CHAN	1,918
Lanrover/E Plus 2-BRI ST, 4 Channels, Enet	2,075
Lanrover/E Plus 4-BRI ST, 8 Channels, Enet	4,760
US ROBOTICS Sportster ISDN adapter	224
DataBurst Ext. Parallel Port ISDN w/NT1	275

Internet Solutions

3COM OfficeConnect Gateway 535 ISDN IPX to IP	1,468
BAY NETWORKS 20 Usrs 1 Enet w/33.6k	1,896
Instant Internet 20 User, 2 Enet w/ 33.6 modem	2,086
Instant Internet 20 Users, 1 Enet w/ ISDN	2,200
Instant Internet 20 Users, 2 Enet w/ISDN	2,403
Instant Internet 10-User Add-On Pack/30 Users	379/2,734
100 Users w/ Dual-Enet & DDS support	3,657
100 Users w/ Dual-Enet & T1 CSU/DSU	3,029
CISCO Microweb Server	907
FARALLON Netopia Internet Router IP/Appletalk	1,061
Netopia Internet Rtr TCP/IP 12-Users/.Unlimited	752/874
HP AdvanceStack Internet Router module J3138A	2,898
RAMP Networks WebRamp Entre	681
WebRamp IP ISDN Router/IPX Router	606/1,169
WebRamp M3 IP Rounter w/ 3 Serial ports	349

Network Printing Solutions

3COM Office Connect Print Server (2P)	340
CASTELLE LANpress 3P/100 (10/100BTX)	***9/30 352***
HEWLETT PACKARD JetDirect 10BT MIO	339
JetDirect Combo MIO BNC/10BT	400
JetDirect Card for 10/100Base-TX J2556B	407
JetDirect Ethernet EX Plus/ EX Plus 3	306/420
JetDirect Token Ring EX/EX Plus3	567/682
INTEL Netport EL Ethernet/Token Ring	422/588
NetportExpress XL for Ethernet/TR	415/565
NetportExpress Pro 10BT Int(MIO)/3 Pack	175/747
NetportExpress Pro 100 10/100BTX 1P/3Pack	273/739
NetportExpress Pro 100 10/100BTX 2P/1S/3Pk	396/1,068

Network Fax Solutions

3COM Office Connect Fax Server (1L)	1,277
CASTELLE FaxPress 1500 1-Line/2-Line	1,970/2,365
Faxpress 3000 2-line/FaxPress 3000 4-line	2,948/3,574
Faxpress 3500 2-line/FaxPress 3500 4-line	3,196/3,762
CHEYENNE FaxServe NLM 5/10/25	393/717/1,177
FaxServe NLM 50/100	1,816/2,533
FaxServe NLM 250	3,801
ZOOM Multiline 8 slot w/4 fax modems, hot swap	937
SYMANTEC Net Satisfaxtion 25/1000 users	742/990
Starter Kit (1 Server, 2 nodes)	258

Network CD-ROM

3COM OfficeConnect CDROM server	650
MICROTEST Discport Ethernet/Token Ring	410/791
Discport Pro w/ Discview ENET/TR	791
Discport XL ENET w/Discview Pro	779
Discport w/ 4CDROM in 7-Unit Tower	1,516
Discport w/ 7CDROM in 7-Unit Tower	2,008
Discport XL w/ 4CDROM in 7-Unit Tower	1,740
Discport XL w/ 7CDROM in 7-Unit Tower	2,232

Uninterruptible Power Supplies

APC Back-UPS 400/450/600	151/185/256
Back-UPS Pro 420/650/1000/1400	251/310/404/521
Powerchute Plus for Novell/Unix/Windows NT	99/149/99
Smart-UPS 700NET/1000NET/1400NET	389/540/671
Smart-UPS 2200NET/3000NET	1,067/1,788
Matrix 3000/5000/Smartcell	3,720/4,616/537
SNMP Agent for Novell/SNMP Mgr for Netware	125/145

Cable Testers & Supplies

ALLENTEL AT680RJ45 Crimper	50
AT10K Crimper Kit w/5 DIES & case	259
RJ45 10 BaseT Connectors (100 pak)	40
10Base-T Cable (1000' min) LV3/LV 5	100/200
FLUKE LAN CableMeter 620/CableMeter 650	728/1,760
MICROTEST Cable Tester	300
Penta Scanner w/Super Injector	3,019

E-Mail

MICROSOFT Mail Server + 10 Users	480
Mail 5/20/100 Users	273/930/3,633
MHS Gateway/PROFS	708/3,405
SMTP/X400/Fax Gateway	3,241/3,194/1,419
Exchange Server Single w/ 5/10/25	1,014/1,368/2,160
Exchange Server Enterprise w/25/50 Clients	4,099/5,429
Exchange Add'l Clients 5/20	366/1,160
Exchange Internet Mail Connector	498

Network Management

3COM Transcend Workgroup Mgr for Windows	461
Transcend Enterprise Mgr for Windows	2,453
HP Openview Pro. Suite	1,122
INTEL LanDesk Mgmt Suite 5/10/100 users	522/696/4,240
LanDesk Server Manager Pro	1,232
NOVELL Lanalyzer for Windows	1,021
NetWare LANalyzer Agent Multi-Segment	1,178

Network Utilities

CHEYENNE AuditWare for NDS 100/Enterprise	460/851
Directory Mgmt. Combo/Enterprise	850/1,951
InocuLAN Wrkgrp/1Svr-Unlimited w/25 clients	301/648
InocuLAN 5 Svr-Unlimited Users	2,363
InocuLAN Option v4.0 for AS 6 w/ 25 clients	313
INTEL LanDesk Virus Protect NW(Single)	1,024
LanDesk Virus Protect 4-pk/20-pk	3,460/14,438
ONTRACK Data Recovery NetWare	411
SEAGATE Prepare! Disaster Recovery SW	525

Server Mirroring

VINCA Campus Standby Server Software for NW	2,228
Standby Server NetWare/Windows NT	2,535/2,535
Entry StandBy Server/SnapShot Svr for NW	966/736
Standby Server Many-To-One	5,071

Windows NT Solutions

3COM Transcend Workgroup Mgr for NT	463
Transcend Enterprise Manager	2,353
CHEYENNE Arcserve for Windows NT v6.0, Single Svr.	490
Arcserve for Windows NT v6.0, Enterprise Edition	860
Arcserve for NT NetWare Agent	438
Arcserve Changer Option for Windows NT	365
Arcserve Disaster Recovery Option for NT	271
InocuLAN for Windows NT 1 Svr	651
Open File Agent for Windows NT	421
EXECUTIVE SOFTWARE Diskeeper/5-Pack	266/1,089

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BY DAVID NOACK

Online Gaming

Match Skills With A World Of Opponents

Are you ready to save Los Angeles from alien pigs? How about battling evil empires from outer space or matching wits and cunning against a wily opponent on the other side of town—or halfway around the world?

Back in the old days (maybe three years ago), to play an online game against a real, live opponent you had to be connected to a Local Area Network, or you wired two computers together in the same room and went at it.

> **Over the last year there's been a boom in online gaming,** where from the comfort of your home, with controller in hand, you can play other gaming enthusiasts.

But over the last year there's been a boom in online gaming, where from the comfort of your home, with controller in hand, you can play other gaming enthusiasts.

Faster modems, easy and cheap Internet access, and increasingly powerful computers are making Multi-Player Online Games (MPOGs) possible. And while online gamers line up to battle among themselves for bragging rights, there is also growing competition among the companies vying for your online dollar.

For the most part, proprietary software is going by the wayside. Most new upstart and revamped online gaming services have tossed aside special software and decided to use the Internet as their gaming pipeline.

Jupiter Communications Inc., a New York City-based online market research firm, estimated in a study last year that online gaming could generate as much as $1.6 billion in business annually by the year 2000. The report notes that large media companies, long-distance telephone carriers, cable providers and small boutique game developers will all get into the game.

So far, about 8% of US households with personal computers and Internet access play online games. However, the number of US households with Internet access and playing online games is slated to grow to 20% or 7.2 million households by the turn of the century.

In order to participate in most of these games all you need is an Internet connection through a local Internet Service Provider (ISP) or one that is favored by the online gaming company, at least a 28.8 or 33.6Kbps modem, Windows 95 and enough money—anywhere between $10.00 to $60.00 a month. Some of the online gaming firms also have struck deals with online services, such as America Online, Prodigy and Microsoft to provide access to their games via these services.

Online gaming companies provide attractive deals, the latest games, reliable access, messaging areas, chat rooms and most of all, a steady stream of players to be challenged.

To get the software needed to play online games, you can either download it from online gaming Web sites or order a CD-ROM. There is a registration process to set up an account and then you're set. While most of the online games are available via the Net, there are a couple of services where you dial in to servers scattered around the country, mostly in urban areas.

Let's take a look at some of the most popular pay-to-play online gaming services, see what they have to offer, what separates them from the rest, and what plans they have to retain and grab new users. (Some of these gaming services were still in beta testing when this piece was written. They all planned to be online by the time you read this.) In addition to these online games, more are coming online every month.

Just a word of warning—the list of games featured here is by no means comprehensive, and even some of the information may change in the fast-paced online gaming business.

Cyberpark

Cyberpark is a virtual interactive 3-D community that is filled with games, entertainment and social activities. The park is built around a series of neighborhoods. You create your own virtual self—an avatar—which you use to navigate through Cyberpark to communicate with other online adventurers. A neat feature is the sound capability of your avatar. When you first log into the service, you'll be launched into Body Boutique, where you customize your 3-D body.

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PCI Video Accelerator Cards from Media Vision!

Check this...blazing fast and screaming fast "ProAxcel" VGA accelerators from Media Vision! Both support MPEG, AVI, and other full-motion video formats. Check out the review on the Web at http://goinside.com/97/4/pro.html -- Both cards are new in box and have a 90-day HSC Warranty

MEDIA VISION PROAxcel

- ◆ Blazing fast 64-bit graphic & video card
- ◆ PCI Bus card with 1MB RAM, expandable to 2MB
- ◆ Uses proprietary chipset (Alliance Semi ProMotion 6410)
- ◆ Resolutions up to 800 x 600, 64K colors with 1MB
- ◆ Up to 1600 x 1200, 256 colors, 800 x 600, 16M colors (requires 2MB) -- Upgrade chipset available, $7.50
- ◆ 30 fps full-screen video playback possible (90MHz Pentium)
- ◆ Win95, NT & 3.1 drivers and full manual on CD-ROM
- ◆ If you can not read CD's, diskettes are available, $2 extra

HSC#16807 **$29.95**

MEDIA VISION PROAxcel 128

- ◆ Screaming fast 128-bit graphic & video card!
- ◆ PCI Bus card with 2MB RAM, expandable to 4MB
- ◆ Uses Tseng Labs ET6000 chipset, MDRAM technology for incredible 128-bit data path at 75 Hz refresh
- ◆ Resolutions up to 1024 x 768, 64K colors with 2MB
- ◆ Resolutions up to 1280 x 1024, 16M colors (with 4MB)
- ◆ Integrated 135MHz VGA compatible 24-bit DAC
- ◆ 30 fps full-screen video playback possible (90MHz Pentium)
- ◆ Win95, NT & 3.1 drivers on CD-ROM, printed manual

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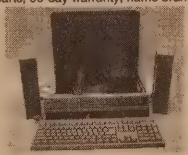
Pentium Ready Kit!

- ◆ Packard Bell Desktop system -- plug in your Pentium!
- ◆ ATX-style motherboard supports up to 133 MHz Pentium
- ◆ Four slots (Three ISA Bus, One PCI Bus)
- ◆ On-board EIDE controller, Flash BIOS, OK cache RAM
- ◆ On-board VGA, 1MB, expandable to 2MB
- ◆ On-board Floppy controller, SIO, PIO
- ◆ On-board 8MB RAM, four open 72-pin SIMM sockets
- ◆ Case is 16.5" square, 4.5" high, has 5.25" & 3.5" bays
- ◆ Speakers, Win95 keyboard, power supply, floppy included
- ◆ Add your Pentium or K5 chip, or order with K5 upgrade
- ◆ Add your hard disk, monitor & mouse, and it's ready!
- ◆ All new parts, 90-day warranty, name brand quality!



HSC# 16851 Kit, no CPU chip **$329.00**

HSC# 16851A Kit with 133 MHz AMD K5 **$399.00**

Skinny SCSI 2X CD-ROM!

- ◆ 1" high SCSI 2x (double speed) CD-ROM drive by Toshiba
- ◆ Model Number XM-4101B made for Sun Microsystems
- ◆ Mounts in regular 5.25" drive bay (with a gap at top of bezel)
- ◆ Lavender colored faceplate -- made for laptop computer?
- ◆ Meets MPC-2 level specifications, rugged high quality drive!
- ◆ Standard SCSI interface, with drive select jumpers on rear
- ◆ New, in plain white box, 90-day warranty

HSC#16870 **$29.95**

Get ready for our Giant Anniversary Sale!

It's that time again...our annual end-of-summer clean-up sale! We pull out all the stops to make this the high-tech highlight of the summer...Discounts galore, free refreshments, warehouse clearance items, prizes, drawings...and don't forget that at the Santa Clara store, we will be holding our annual warehouse parking-lot sale! Attendees from years past look forward eagerly to this yearly blowout...if you haven't seen it yet, you owe it to yourself to see what it is all about. Mark your calendar now!

September 20, 1997

- ☞ **Discounts all over the store!**
- ☞ **Closeouts, markdowns, special deals!**
- ☞ **Drawings, prizes!**
- ☞ **Free Refreshments!**
- ☞ **Sale event at all three stores!**
- ☞ **Huge parking-lot sale** (Santa Clara store only)
- ☞ **The Bay Area's high-tech event of the year!**

Don't Miss It!

Have you shopped at HSC yet?

HSC Electronic Supply has been providing Silicon Valley with convenient high-tech shopping for over thirty years...even before there was a Silicon Valley! Can you afford not to know about northern California's best selection of electronic components, test equipment, tools, computers, parts and other-worldly electronic gizmos? In addition to our huge assortment of Silicon Valley's surplus electronics, we are also authorized distributors for some of the country's leading manufacturers of electronic parts, prototyping supplies, tools, test equipment, books and magazines. Stop into one of our three stores and look around, we think you will be amazed. As always, the coffee is free, and our friendly staff is waiting to answer your questions.

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Small Mono-VGA Monitor

- ◆ 9" diagonal measure paper-white phosphor VGA monitor
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- ◆ Non-Glare screen, swivel base
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Absolute Last of the Red Hot Reno!

- ◆ Now at clearance price -- Media Vision *Reno*:
  - ☞ Consists of new external Reno CD/ROM drive, docking bay with SCSI2 port, AC Adapter, cable kit, travel pouch, headphones
  - ☞ Late Model version Uses AC adaptor (included) or AA alkaline batteries (not included)
  - ☞ Double-speed 180mS drive is lightning fast!
  - ☞ Drive detaches from docking bay, use with headphones as a portable personal audio CD player
  - ☞ Great for Mac or IBM (adaptor bracket included)
  - ☞ Mac software included
  - ☞ SCSI Controller & software required for IBM use
  - ☞ Brand new, 90-day warran

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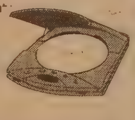

Available Separately:
A. Macintosh Powerbook SCSI Adapter (HDI-30 to 25-pin D connector) **HSC#15704** **$12.50** if purchased alone, or with purchase of Reno Kit, **$5.00**

Super Sounding Speakers!

Tired of the cheesy sound coming from those give-away speakers in your multimedia kit? Try upgrading to these sonic wonders...you'll have to hear them to appreciate the difference these will make without blowing your budget!

GNT2002 2-way Bass-Reflex speakers

- ◆ 3.25" woofer, 1" piezo tweeter, ported enclosure
- ◆ 15W built-in amplifiers, 80W peak, 5.4W RMS
- ◆ 40 - 20,000 Hz, built-in SRS 3-D stereo
- ◆ Measure approx. 3.75" x 6.125" x 9.25" tall
- ◆ AC adaptor, audio cables included
- ◆ On-off switch, 3-D switch, bass, treble & volume controls
- ◆ Attractive off-white finish with grey grille-cloth

HSC#16884 **$34.95**

GNT3500 3-way Bass-Reflex speakers

- ◆ 4" woofer, 2" midrange, 1" piezo tweeter
- ◆ 23W built-in amplifiers, 120W peak, 20W RMS
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There are more than two dozen games to choose from, including traditional card games, board games, action/arcade-type games and sports, strategy and simulation games. Chat rooms include the Big Game Lodge, Baseball Dugout and Desert Oasis Casino.

That said, the only way to access WorldPlay is via America Online. Other sites will be launched on AT&T's WorldNet Service and EarthLink.

American Online users can select AOL/keyword: WorldPlay.

Cyberpark was initially from the folks at the ImagiNation Network, which was originally Sierra-Online. It was sold to AT&T and in turn is now a wholly-owned subsidiary of AOL Studios.

DWANGO

First of all, Dwango stands for Dial-Up Wide Area Network Game Operation. The folks at Dwango have established alliances with several of the top game makers in the country, such as id Software and Apogee, to bring you their most popular games via twenty-seven servers located in cities including New York, Chicago (which has two servers), Miami, Dallas and San Diego, among others. Now that's that out of the way, what can you find on DWANGO?

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Since DWANGO is not Internet-connected, you have to dial in to one of the servers; setting up an account on one server does not mean you can dial-in to any other server and expect to have an account. The most popular games on DWANGO are *DOOM* and *DOOM II*, but there are also other games such as *Heretic, Hexen, Strife, Terminal Velocity* and several more.

Recently, DWANGO teamed up with Microsoft to provide members of the Redmond, WA, company's Internet Gaming Zone access to DWANGO.

ENGAGE

ENGAGE features a number of high-end, multi-user games such as *Descent, Castles II, Advanced Dungeons and Dragons,* and *Splatterball,* among others. Other games include: *Blood Descent, Diablo, TeleArena, Rolemaster,* and even the *US Chess Federation.* In addition to games, there is also online chat and a variety of bulletin boards.

ENGAGE games online president Jeff Leibowitz has been named as one of the most influential people on the World Wide Web, according to *Websight* magazine's second annual Websight 100. ENGAGE games online, one of

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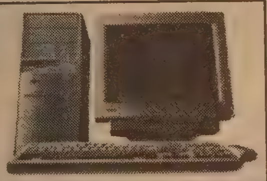

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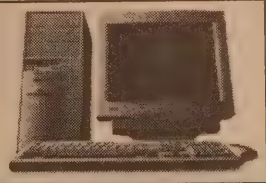

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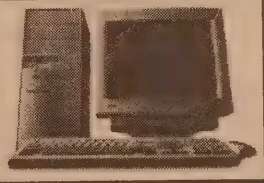

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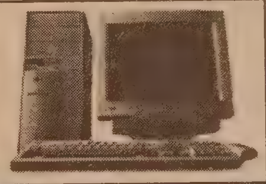

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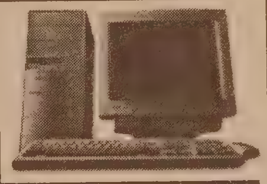

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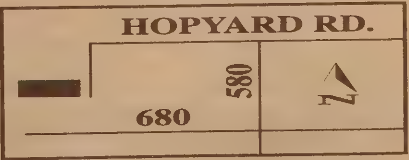

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Online gaming *continued...*

the world's leading online multi-player game services, was the only online gaming service to have an executive appear on the list.

Kali

While not exactly an online game in the truest sense of the term, Kali is an Internet utility that emulates (pretends to be) an IPX network connection—fooling your computer to think that it's part of a Local Area Network or LAN. There is a shareware program that stops after 15 minutes of play unless you register it. The registration fee is $20.

Kali supports more than a dozen popular games including *Duke Nukem 3D, Top Gun, VR Pool* and others. Software is available for a number of platforms, including DOS, OS/2, Macintosh and Windows 95.

One drawback of Kali is the "latency" or lag time between when you decide a course of action and it's executed on your monitor. Unless you have a fast modem, the experience can be frustrating.

Multi-Player Games Network

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All you need to access MGP-Net is an ISP connection, and you're ready to take part in games, read and post messages in the forums or head to the Pub for real-time conversations about the latest game strategy or game development. The games include *The Kingdom of Drakkar, Empire Builder, Junta, Minion Hunter* and a few more. You can sign up from the Web site. You can

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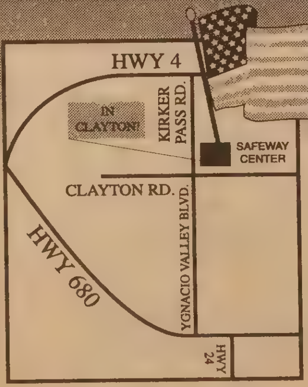

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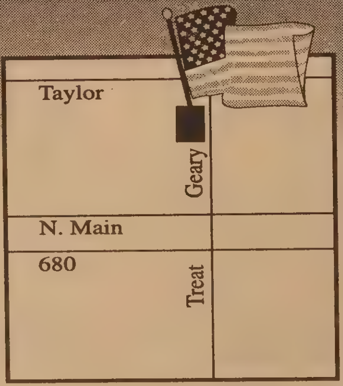

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Logitech MouseMan Serial Mouse
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P5166MX Multimedia System

ABIT 430TX Chipset Motherboard (ATX)
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Microsoft® PS/2 Ergonomic Mouse
Microsoft® Windows 95 (OSR2)

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CPU Heatsink & Cooling Fan
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Adaptec 2940U Ultra SCSI
Lightspeed 128 PCI 2.25mb MDRAM
8X SCSI-2 Int. CD ROM Drive
3Com 3C509-TPO ISA PnP
Keytronic 104 Enhanced Keyboard PS/2
Premium Mid Tower ATX Case w/PS
Logitech MouseMan PS/2 Mouse
MS Windows NT 4.0 WS & J++

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CPU Heatsink & Cooling Fan
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HP LaserJet 6Lxi	$389
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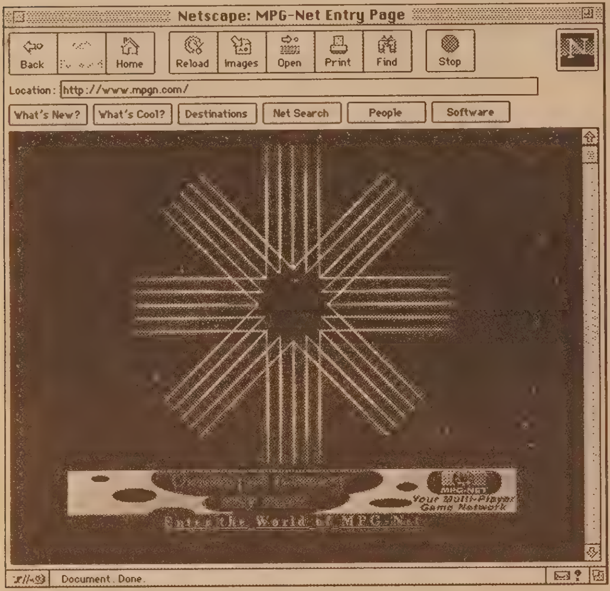
Online gaming *continued...*



Location: http://www.mpgn.com/

Document: Done

get the software via a CD-ROM or on the service's Web site. But since the programs are so big—28MB—it's best to get the CD.

Mplayer

Mplayer will be a full-fledged online gaming service. Since it's designed for game playing on the Internet, you'll need an ISP (they recommend PSI Net).

The games range from combat to simulation and strategy. Titles include: *Command & Conquer* and *Terminal Velocity*. Upcoming titles will include *Deadlock, SimCity 2000,* and the enormously popular *Quake.* You can either get the special software on CD-ROM via snail mail or download it from their Web site.

While playing games in Mplayer is free, there is always Mplayer Plus, which is a fee-based service, costing $29.95 per year. Here you'll have unlimited access to the latest games, a subscription to *PC Games* magazine and other surprises.

Total Entertainment Network (TEN)

One of the most popular Internet gaming entrants is the Total Entertainment Network or TEN, which was formed in 1995 by a merger of Planet Optigon, Inc. and Outland, Inc. The new service offers game-hungry players such treats as *Dark Sun, Duke Nukem 3D, Command & Conquer, Quake,* and *Panzer General*; the number of games is slated to grow over the next several months.

All you need to do to participate in TEN is to download the front-end software, which is available on the service's Web site (or you can order a free CD-ROM). Other game titles slated to TEN include *Deadlock, Ultimate Duke, SimCity 2000,* and *Master of Orion.* In addition to multi-player games, TEN also has chat rooms, as well as the ability to check on the ranking and profiles of competitors. ■

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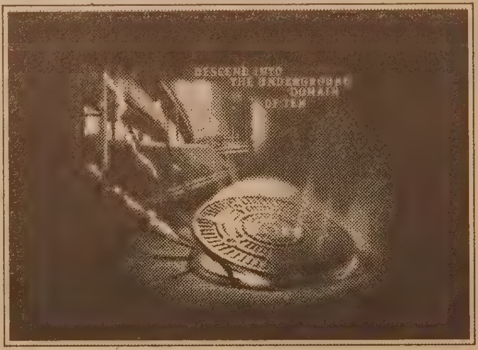

http://www.ten.net

Online gaming companies provide attractive deals, the latest games, reliable access, messaging areas, chat rooms and most of all, a steady stream of players to be challenged.

RESOURCES:

Cyberpark
WorldPlay Entertainment (Formerly Imagination Network)
(415)548-2500
URL: *http://www.worldplay.com/*
Windows 95
Cost: $1.99 for AOL subscribers in addition to the billing plan.

DWANGO
Interactive Visual Systems Corp.
(714)467-0405
URL: *http://www.dwango.com*
Windows 95, DOS
Cost: $7.95 monthly includes unlimited time in chat lobby and 5 hours of gaming. Other pricing options are: 10 hours for $19; 20 hours for $34 and 40 hours for $59.

ENGAGE
(310)306-5630
URL: *http://www.gamesonline.com*
Windows 95
Costs: Free to users of AOL, Prodigy, Time Warner Cable and Concentric Network. All others pay $1.95 an hour.

Kali
Kali, Inc.
URL: *http://www.kali.net*
DOS, OS/2, Windows 95, Macintosh
Cost: $20 to register the Kali shareware program.

Multi-Player Games Network (MPG-Net)
(305)296-6665
Windows 95
URL: *http://www.mpgn.com*
Cost: First month $4.95; $9.95 monthly for unlimited play time.

Mplayer
Mpath Interactive
(408)342-8800
Windows 95
URL: *http://www.mpath.com*
Cost: Free (Internet account required)

Total Entertainment Network (TEN)
(415)778-3500
Windows 95
URL: *http://www.ten.net*
Costs: $9.95 for five hours of game time per month. Additional hours are 95 cents each. The flat-fee plan is now $19.95 for unlimited time and there's also a TEN V.I.P. plan, which allows members to have three months of access for the price of two months, at $39.90 instead of $59.90.

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Accord Systems *http://www.accordsys.com* Accord Systems distributes Novell Labs, tested and approved Ethernet, ARCNet, Token Ring network products, as well as fine notebook computers. [Exp. #171.]

Arlotto Home Page *http://www.arlotto.com* ISDN and networking equipment manufacturer. [Exp. #169.]

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California Electronics, Inc. *http://www.calpcparts.com* [Exp. #169.]

CD World—World Wide Web *http://www.cdworld.es* CD Recorders, CD Replicators, and blank CDs. [Exp. #169.]

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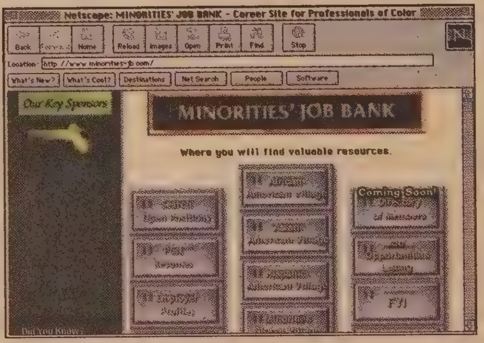
Netscape: MINORITIES' JOB BANK - Career Site for Professionals of Color

Location: http://www.minorities-jb.com/

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http://www.minorities-jb.com

Netscape: Index

Location: http://www.ci.sf.ca.us/recpark/

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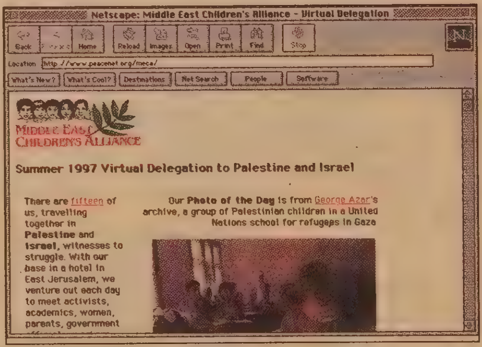
Netscape: Middle East Children's Alliance - Virtual Delegation

Location: http://www.peacenet.org/meca/

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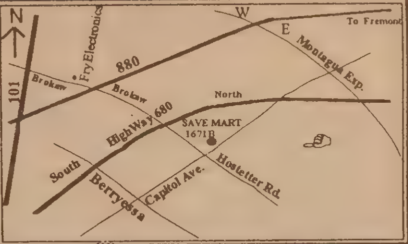

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- **Phoebe 33.6** fax modem
- 80 watt Stereo speakers
- CPU Cooling Fan
- Free Power Surge
- **Windows 95B** CD&Manual

Pentium® Processor		
233 MHz MMX		1261
200 MHz MMX		1133
200 MHz		1115
166 MHz	MMX	1034
150 MHz		986
133 MHz		992
100 MHz		976
90 MHz		941

(Triton TX Mboard Add $30)

SPECIAL

PENTIUM® 166 MMX
24x MULTIMEDIA

- Intel Tucson (MB made by Intel) PCI **512K Pipelined** Burst.
- Pentium® 166 MHz MMX CPU
- **32 MB EDO RAM**
- EIDE PCI w/I/O 16550 built-in
- **2.10 GB EIDE Hard Disk**
- TEAC 1.44 Floppy Drive
- Diamond St 64 2001 video PCI 2 MB
- Impression 15" .28 Monitor
- ATX Mid Tower w/ 250 Watt
- Keytronic win 95 PS2 Keyboard
- Microsoft PS2 Mouse w/ Pad
- US ROBOTICS 33.6 w/ Voice
- Toshiba 24X IDE CD-ROM
- Yamaha stereo sound 16
- 180 Watt Speakers+ Power Center
- Windows 95B full version w/ CD

only **$1346**

pentium®200	$1427
pentium®200MMX	$1445
pentium®233MMX	$1573

SUPER SALE

	MB+CPU
Intel Portland Pen II 300/512K	$Call
Intel Portland Pen II 266/512K	919
Intel Portland Pen II 233/512K	790
Intel Venus Pen Pro 200/256K	599
Intel AN430TX P-233 MMX /512K	571
Intel AN430TX P-200 MMX /512K	433
Intel AN430TX P-200 /512K	415
Intel AN430TX P-166 MMX /512K	334
Intel AN430TX P-150 /512K	286
Intel AN430TX P-133 /512K	292
Intel AN430TX P-100 /512K	276
Intel Tucson P-233 MMX /512K	566
Intel Tucson P-200 MMX /512K	428
Intel Tucson P-200/512K USB	410
Intel Tucson P-166 MMX /512K	329
Intel Tucson P-150/512K USB	281
Intel Tucson P-133/512K USB	287
Intel Tucson P-100/512K USB	271
Intel Marl P-233MMX /512K (ATX)	488
Intel Marl P-200MMX /512K (ATX)	360
Intel Marl P-200/512K PCI (ATX)	342
Intel Marl P-166MMX /512K (ATX)	260
Intel MarlP-150/512K PCI (ATX)	213
Intel Marl P-133/512K PCI (ATX)	219
Intel Marl P-100/512K PCI (ATX)	203
Asus TX97+ P233MMX/512K	541
Asus TX97+ P200MMX/512K	413
Asus TX97 + P200/512K	395
Asus TX97 + P166MMX /512K	314
Asus TX97 +AMD K6 233MMX/512K	471
Asus TX97 +AMD K6 200MMX/512K	381
Asus TX97 +AMD K6 166MMX /512K	316
Triton TX + P-233 MMX/512K	491
Triton TX + P-200 MMX/512K	353
Triton TX + P-200/512K	335
Triton TX + P-166 MMX /512K	254
Triton TX + P-150/512K	206
Triton TX + P-133/5126K	212
Triton TX + P-100/512K	196
Triton VX + P-200 MMX/512K	335
Triton VX + P-200/512K	317
Triton VX + P-166 MMX /512K	236
Triton VX + P-150/512K	188
Triton VX + P-133/5126K	194
Triton VX + P-100/512K	178
Triton VX + P-90/512K	145
AMD K6-233 + Triton VX 512K	403
AMD K6-200 + Triton VX 512K	313
AMD K6-166 + Triton VX 512K	248
Intel 486DX4-100MHz + MB256K	110

Sale

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MB+CPU, socket 7 from 75 MHz to 200 MHz, EIDE PCI built-in I/O 16550. MMX™ Technology READY

Diamond Stealth 64 2001 2MB only $40

Creative Labs AWE64 only $79

72 PINS MEMORY

8 MB 60ns 72 PIN EDO (16 chip)	33
16 MB 60ns 72 PIN EDO (8 chip)	55
16 MB 60/70ns 72 PIN (4x36)	60
32 MB 60ns (8x32)EDO / 8x36	110/120

30 PINS MEMORY

1 MB 60/70/80ns 30 PIN (1x3)	Good 5
4 MB 60/70ns 30 PIN (4x9 - 9 chip)	25

SDRAM LONG DIMM

16 MB SDRAM 10ns (2x64)	70
32 MB SDRAM 10ns (4x64)	130
64 MB SDRAM 10ns (8x64)	290

MONITOR

Impression 3 plus/ 4VX 14" .28	160/170
Impression 5 plus/ 5VX 15" .28 flat	235/245
Impression 7 plus 17" .27	430
Sony 100SX /100SF 15" .25	329/379
Sony 200SX/200SF 17" .25	615/735
Mag1595/NEC C500	290/365
ViewSonic 15GS/G771 .27	330/540
ViewSonic 17PS .25	685
Hitachi 630 17" .22	645

MISCELLANEOUS

Zip 100MB IDE internal w/disk	115
Zip disk 100 MB	15
Jazz 1GB SCSI internal/external	299/399
NetMouse serial/PS2	15
Logitech Mouse 2 buttons/3buttons	15
Logitech Mouse PS2 /3buttons	12/15
Logitech MouseMan serial/PS2-3but	25
1.44 Teac Floppy Drive	25
CPU Cooling Fan 486/P5 75-233	5
CPU Cooling Fan for Pentium II	20
80 Watt/180 watt Speakers	15/35
240 w/ Subwoofer	75
YAMAHA M7/M15 speakers	45/75
YAMAHA Subwoofer M7/M15	150/180

MULTIMEDIA

ESS 1688 stereo sound 16 PNP	20
Creative Labs SoundBlaster 16/SB32 PNP	45/65
Creative Labs SoundBlaster AWE64	Good 79
Creative Labs SoundBlaster AWE64 Gold	185
MITSUMI 4x/8x EIDE CD-ROM	Good 45/65
MITSUMI 16x EIDE CD-ROM	45
TOSHIBA 24x EIDE CD-ROM	99
PANASONIC 24x EIDE CD-ROM	99
TOSHIBA 12x/15x SCSI CD-ROM	130/160
PANASONIC 8X SCSI	90

CASES

Mini Tower Case w/LED 230 Watt P.S	Good 25
Super Mini Tower Case w/LED 230 Watt P.S	35
Desktop AT case w/LED 230 Watt P.S	40
Medium Tower Case w/ LED 230 Watt P.S	45
Full Tower Case w/LED 250 Watt P.S	65
ATX Mid Tower w/ 235 Watt (2 Sides open)	90
ATX Medium Tower case w/ 250 Watt P.S.	75
ATX Full Tower 250 watt / 300 watt P.S	110/130

HARD DRIVERS

Fujitsu 1.20 / 2.10 / 2.60 EIDE	150/170/196
Quantum 1.60/ 2.10 EIDE FB-ST ULT 33mb/s	170/185
Quantum 3.20/ 3.80 EIDE FB-ST ULT 33mb/s	235/265
Quantum 4.30/ 6.40 EIDE FB-ST ULT 33mb/s	275/339
Quantum 1.00 / 2.10/3.20/ GB SCSI	160/235/329
Quantum 4.30 / 6.40GB SCSI	397/540
Quantum 2.20 / 4 50GB SCSI ULT-W SCSI	352/709
Western Digital 1.20 / 1 60 GB EIDE	160/170
Western Digital 2 10 / 2 50 GB EIDE	185/205
Western Digital 3.10 / 4.00 GB EIDE	235/280

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1- One year parts & labor warranty
2- Not responsible for typos
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4- 15% Restocking fee on returns No refunds after 7 days
5- Prices based on cash or checks only

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VGA

TV+VGA Trident w/ 2mb w/remote	135
S3 Virge 3D 64 PCI 4MB	Good 49
S3 PCI video 1mb/2mb	25/35
Cirrus Logic 5446 PCI 2mb	35
Matrox Millennium PCI 2mb	115
Memory Upgrade For Millennium 4mb	140
Matrox Millennium II PCI 4mb	190
Memory Upgrade For Millennium II 4mb	185
Matrox Mystique PCI 2mb/4mb	80/115
DIAMOND	
Stealth 64 2001 2mb DRAM	40
Stealth 64 3D EDGE Multimedia PCI 2mb	75
Stealth 64 3D 2000 PCI 2mb/4mb EDO	49/80
Stealth 64 3D 3000 PCI 4mb VRAM	145
MPEG Card upgrade (M1100)	70
Diamond 3d Monster 4 MB DRAM	155

CONTROLLERS

IDE ISA + I/O /w/ high speed 16550	10/15
EIDE VLB w/ I/O high speed 16550	20
Adaptec SCSI 2940 PCI	139
Adaptec SCSI 2940U/2940UW PCI	160/185
Adaptec SCSI 3940/3940U PCI	195/255

NETWORK CARD

3com 3C900 PCI TPO / combo	80/95
3com 3C905 TX PCI/100BaseTX	80
SMC8416 BT/9332BDT	85/125
NE2000 combo PNP-ISA/PCI	20/25

FAX-MODEM

PHOEBE 33 6 Fax-Modem/Voice	49/55
PHOEBE 56K Fax-Modem/Voice	105/110
US ROBOTICS 33.6 (internal)	80
US ROBOTICS 33 6 w/voice	85
US ROBOTICS 56 K /Voice	135/145
US ROBOTICS 56 K /Voice (Ex)	199/220

Web Page Listings *continued...*

1st Family Of Internet Services *http://members.tripod.com/~altek* Offer Internet access and earn up to $20,000/month. [Exp. #169.]

1st Web Site Designs *http://www.globalpac.com/webs* Professional Web site programming and design at affordable rates. Hosting available from $5/month. [Exp. #171.]

A2ZBIZ—Total Internet Presence *http://www.a2zbiz.com/* Professional services in site design, multimedia, and hosting. Extensive marketing experience, reasonable prices. [Exp. #169.]

Accesspoint *http://www.apc.net* $18.95 dial-up. $29.95 Web hosting with domain name, unlimited traffic, and FP extensions. [Exp. #169.]

Another Color *http://www.anothercolor.com* Communication design. [Exp. #169.]

BotSpot *http://www.botspot.com* The spot for all bots on the Net, including fourteen searchable bot classification databases, FAQs, libraries, articles, newsletters, e-journals, and more. [Exp. #170.]

Creative Computer Solutions *http://www.hooked.net/~davemark/mactech.html* Web design for small businesses, schools, and individuals. Macintosh tech support and training also available. [Exp. #171.]

DIALOG Select *http://dialogselect.krinfo.com* Information retrieval service for professionals. [Exp. #169.]

Direct E-Mail List Source *http://www.copywriter.com/lists/* The directory provides access to thousands of email lists and media where businesses can advertise without resorting to bulk email spam, or unsolicited commercial email (UCE). [Exp. #170.]

domaiNation *http://www.domaination.com* Big domains, little prices. [Exp. #171.]

Facilitate.com *http://www.facilitate.com* Collaborative groupware applications that provide an electronic conference center where multiple meetings and discussions can be conducted. [Exp. #171.]

Fast Duck Productions *http://home.earthlink.net/~fastduck/index.html* Web services, amateur video production, 3-D, VRML, and a lot more. [Exp. #171.]

First Internet Alliance—San Jose *http://www.fia.net/sjs* Internet Service Provider; total turnkey Internet solution. [Exp. #170.]

Global Entrepreneurs Network *http://www.gen.com/mp/512728* Web page hosting from $49/year. International business opportunity as a certified Internet marketing consultant. [Exp. #171.]

Gowan.net *http://www.gowan.net/* A comprehensive Web site dedicated to a Web consulting service. [Exp. #170.]

HomeGate Corp. *http://www.homegate.net* Internet roaming service. [Exp. #169.]

HomePage Designers *http://www.1stnetusa.com/~alex_d/hpdesigners.htm* Professional-looking home pages, for an unprofessional price. [Exp. #171.]

Internet-Frontier *http://internet-frontier.net* Full-service Internet Access Provider. Low prices, reliable services, local access. [Exp. #169.]

Marinternet *http://www.marinternet.com* Internet for Marin residents. Locally owned and operated. Online users 30 days free for switching: $19.95. [Exp. #169.]

Media In Motion *http://www.mediainmotion.com* Intelligent, robust, and affordable electronic commerce site creation. [Exp. #170.]

Merchant Manager *http://www.merchantmanager.com* Complete solution for managing your online business. Build and edit pages, manage inventory and credit cards from your browser. [Exp. #169.]

Online Payments Methods *http://www.transaction.net/payment* Reviews and descriptions of the latest payment methods for use on the Internet. [Exp. #171.]

P-Net *http://www.p-net.com/* P-Net offers complete design, service, and support for your Web pages, including HTML coding, CGI scripting, and scanning. [Exp. #169.]

Pacific Business Systems *http://www.pbs1.com* Internet access and Web page housing. First month free. (714)452-9110. [Exp. #169.]

Plugnet—Page d'accueil *http://www.plugnet.com* Bienvenue sur le site de l'atelier de conception Internet Plug@Net. [Exp. #170.]

Power Of 2 Web Site *http://idt.net/~powerof2/index.htm* Consulting services and related directories. [Exp. #170.]

Recording Studio Menu *http://www.recordingstudiomenu.com* An innovative Web site service and directory for recording studios, rental companies, producers, engineers, etc. [Exp. #171.]

Red Shift Internet *http://www.redshift.com* Local calls to San Jose, Santa Clara, Cupertino, Sunnyvale, Mtn. View, and more. Unlimited access $16.95/mo. [Exp. #169.]

Redirection Service *http://come.to* We redirect your hard-to-remember address and give you an easy-to-remember URL. [Exp. #170.]

RJM & Associates *http://www.rjmassociates.com* Web site creation and hosting for the small business entrepreneur. [Exp. #169.]

San Francisco Ad Net *http://www.sfadnet.com* Professional Web page design and domain name starting at $99. Get a free ad in our online classifieds. [Exp. #169.]

Saturn Services *http://www.saturnservices.com* The economical Web space provider. [Exp. #169.]

Shea Co. Internet Marketing *http://www.sheaco.com* A full-service online marketing company. [Exp. #171.]

Shop Internet Service *http://www.opax.com/sis/* Internet Presence Provider. [Exp. #169.]

SISNA *http://www.sisna.com/sanjose* Unlimited access as low as $17/mo. Special student rates as low as $12/mo. [Exp. #169.]

Studio Gallo *http://www.studiogallo.com* Web site design. [Exp. #171.]

Web Craft Designs *http://www.webcraftdesigns.com* Quality Web page design for small businesses. We do custom graphics, consultation, page design, etc. [Exp. #171.]

Web Site Manager *http://www.adgrafix.com/info/aprice* Easily create, update, and manage your Web site. Online demo. [Exp. #171.]

WebControl—Internet Service Provider *http://www.webcontrol.de* Ihr Partner rund um das Internet. [Exp. #170.]

Webgineers *http://home1.gte.net/webgneer/* Professional Web site design and development for your personal or business needs at affordable prices. [Exp. #170.]

ZIIN Internet Services *http://www.ziin.net* ZIIN and ZHSp are dedicated to creating quality Web pages at a low price. [Exp. #169.]

Zimway Consulting Group *http://www.zimway.com* Web hosting with domain name, high traffic capability, monthly statistics auto-generated, reasonable prices. [Exp. #171.]

SERVICES & PRODUCTS FOR SALE

A. Bonomolo Transportation & Tours *http://www.comm.net/~limobono* Chauffeur-driven sedans, limousines, vans, minibuses, executive transporters, limo and standard motor coaches. [Exp. #169.]

ABC Storybooks *http://w3ent.com/abcstorybooks.htm* Personalized storybooks, as well as Barney, McGruff, Precious Moments, and Presto Sticker books. Disney titles and more. [Exp. #169.]

Americlean, Inc. *http://www.americlean-inc.com* Custom high-pressure cleaning equipment. [Exp. #170.]

Anabolic Steroids *http://www.anabolicsteroids.com* Anabolic steroids: obtaining them legally, dosages, avoiding side effects, and much more. [Exp. #169.]

Artrade *http://www.artrade.com* Argentine Export Products. 6,000-company database, real-time information, exportation, business, economy, MERCOSUR. Also in Spanish and Portuguese. [Exp. #169.]

AutoWorld *http://www.autoworld.com* Dealer invoice and actual market value on new and used vehicles. [Exp. #169.]

Baskets By Dorthy *http://basketcraze.com* Bay Area company specializing in custom-designed gift baskets for personal or corporate needs. [Exp. #171.]

Bates International Motor Home Rental Network *http://www.batesintl.com* Motor home rental information worldwide. [Exp. #169.]

Berkeley Square Chauffeur Services *http://www.freepages.co.uk/berkeley_square* Chauffeur hire. [Exp. #169.]

Best Incense *http://www.bestincense.com* We sell the best incense: $1 per pack of 20 sticks. Five pack minimum order. [Exp. #170.]

Bodyguard Extreme *http://pw1.netcom.com/~s/champe/bodygd1.htm* Elite professional bodyguard service. Employ the cutting edge of bodyguarding and executive protection concept. [Exp. #171.]

The Booksmith *http://www.booksmith.com* Online bookstore: searchable inventory, events calendar, reviews, features, and more. [Exp. #171.]

Bose Music Systems *http://www.bose.com* Bose Corp., the world's leading innovator in sound reproduction technology, has announced its long-awaited presence on the World Wide Web. [Exp. #170.]

BPW Limited Photographic *http://www.bpwltd.com* Dealer in collectable and usable cameras, lenses and accessories. We buy, sell, trade and repair worldwide. [Exp. #171.]

Bulletin Book Store *http://www.thedawgpound.com/bulletinbookstore/* Buy, sell, and trade Bulletin Books for almost everything. Free posting. [Exp. #169.]

Business at Home *http://www.mub.com* Home-based business. [Exp. #171.]

Buy Low, Sell High *http://www.csicentral.com* Incredible products and service. The best source of export products from Asia. [Exp. #169.]

Centerclair Nursing Home *http://www.centerclair.com* A nursing facility with skilled nusing accommodations. [Exp. #171.]

CGSS *http://www.cgss.it* Consulting company about environment, safety, health, and quality systems. [Exp. #169.]

Clark Pest Remedy Web Site *http://www.clarkpestremedy.com* Site for promoting safe and effective pest services. [Exp. #169.]

The Clothing Trader Company *http://www.clothingtrader.com* Clothing store on the Internet. T-shirts, clothing, purses, and more. [Exp. #169.]

CMC Web Site *http://www.sitesetters.com/~cmc* Links to other sites offering free gifts, promotions, email, Web pages, etc. Capital Marketing & Communications. [Exp. #169.]

Contractor Network *http://www.contractornet.com* Looking for a contractor? Search our database of local licensed, insured, quality home improvement and commerical contractors of all types. [Exp. #169.]

Cool Shopping Sites *http://www.coolshopping.com* Showcases over 250 of the most innovative, unique, and top-quality shopping sites on the Web. [Exp. #171.]

Custom Truck Products *http://www.customtruckproducts.com* Distributors of quality light truck, van, and SUV accessories. [Exp. #171.]

Dan's Optical Supplies *http://www.dansopticals.com* America's largest wholesale optical supplier. [Exp. #169.]

Diamond International Consolidators Ltd. *http://www.diamond-international.com* [Exp. #171.]

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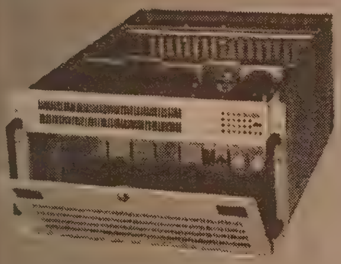

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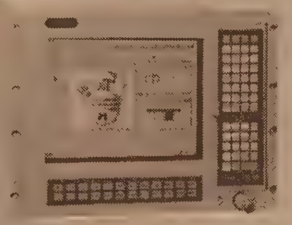

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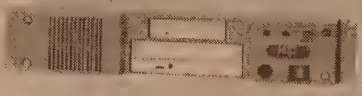

- ✓2U Height (3.5") Chassis
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- ✓PS AC Universal, or DC/+12, +24, -48V
- ✓5-Slots
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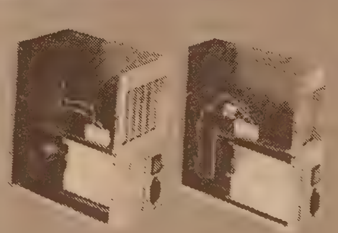
  - Type 2: 5-ISA
  - Type 3: 4-PCI, 1-CPU (PICMG)



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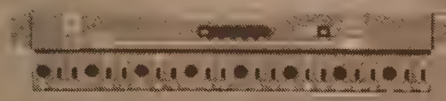

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- ◆ Industrial AC/DC Input Power Supply
- ◆ ISA/PCI Backplane
- ◆ Industrial Chassis

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Web Page Listings *continued...*

Dober Collection Limited *http://freespace.virgin.net/dorber.co.uk/* Greeting card publisher. [Exp. #170.]

Earth Smart Laundry CD *http://www.sirodinc.com/laundrycd1.html* Earth Smart Laundry CD replaces detergent and fabric softener. [Exp. #171.]

Elliott Aviation, Inc. Home Page *http://www.elliottaviation.com* Full Service FBO for General Aviation Aircraft located in the MidWest (IL, IA, MN, NE). [Exp. #171.]

EUROTRADE Tecnologia e Ideas *http://habitat.co.cr/eurotrade* Refrigeration for Central America. [Exp. #169.]

Exceptional Vintage Design *http://www.inch.com/~choreo/choreo* Offering exceptional ladies vintage clothing and accessories from the 1950s and on. [Exp. #169.]

Fantasies In Miniature *http://members.techheadnet.com/miniature* Fine quality miniatures and heirlooms. [Exp. #169.]

Fess Parker Winery & Vineyard *http://mypage.ihost.com/FessParker* Ultra-Premium winery and wine club. [Exp. #169.]

Fiber Of The Future *http://www.tencel.com* The first new fiber in thirty years, blending all of the best elements of current man-made and natural fibers. [Exp. #170.]

Galaxy Mall's *http://www.galaxymall.com/retail/greetings* Greeting cards and reproductions of images from original artwork. [Exp. #169.]

Global Connections New Zealand! *http://www.globalconnections.co.nz* Promotion of environment-friendly gifts and products from developing countries and renewable resources. [Exp. #171.]

Global Discount Virtual Mall *http://www.wimall.com/netvalue* Ever expanding range of quality-discount products. Online discount shopping mall. [Exp. #171.]

Global Environmental Services, Inc. *http://www.ges-inc.com* Water/wastewater treatment plant sales, maintenance, and operation. [Exp. #170.]

Global Lifestyle *http://www.ram.net.au/ul/global/* Multi-level marketing business opportunity site. [Exp. #170.]

Gypsytech *http://www.gypsytech.com* Information and products for people who are colorblind or have low color vision. [Exp. #169.]

Hair Transplant Clinic Of Sacramento *http://www.hairtcs.com/* Advanced hair restoration treatment. [Exp. #169.]

HARPO Tanning Beds & Accessories *http://www.harpo.net* Intelligent tanning solutions for healthy active adults. [Exp. #169.]

Haynl Elektronik *http://www.haynl.com* Develop, manufacture, and distribute continence training devices. [Exp. #169.]

Helm Pain Care Clinic *http://www.worldlink.com.au/webs/LarryM* Acupuncture and traditional medicine holistic treatment. [Exp. #169.]

Home Movie Transfer *http://www.oztech.com/movietime* Home movies, photos, slides copied to video tape. Photos from video tape. [Exp. #171.]

Horticultural Home Page *http://home.earthlink.net/~raretrees* This (commercial) site contains horticultural, landscape, and rare, exotic plant info in great abundance. [Exp. #171.]

The Human Resource Store *http://www.hrstore.com* Outsource your human resource needs. [Exp. #169.]

Hyundai Automotive Australia *http://www.hyundai-automotive.com.au/* Distributors of Hyundai Automotive in Australia. [Exp. #170.]

Il Mercato Delle Squisitezze *http://www.minoli.it* The best italian salami, cheese, and cakes. [Exp. #170.]

Image Management Corp. *http://www.imagemanagement.com* Image Management Corp. provides a wide range of document management services including microfilm, imaging, workflow/information management as well as software development and systems integration. [Exp. #169.]

Independent Claims Services. *http://www.2geton.net* Independent insurance adjusters. [Exp. #169.]

Info Products UK *http://www.infoproducts.co.uk* Corporate reseller. [Exp. #169.]

InMart *http://www.inmart.com/inmart/* Internet grocery shopping in San Francisco—superior quality, competitive prices, and free home or office delivery anywhere in San Francisco. [Exp. #171.]

International Warehouse Logistics Association *http://www.iwla.com* One-stop shop for everything you need to get your product to market. [Exp. #170.]

Intuita And Intuita Mind-LAB *http://www.intuita.com* Intuita specializes in corporate training, personal education products, research, and consulting in intuition and emotional intelligence. [Exp. #169.]

J. Norman Consulting's Web Page *http://www.jnci.com* Web page of J. Norman Consulting, a healthcare consulting firm. [Exp. #169.]

Jaz's Secret *www.cybcon.com/~congo/secret.html* Simply the best Bar-B-Q sauce. Money-back guarantee. [Exp. #169.]

John Harrington—Photographer *http://members.aol.com/JHPhoto* Online portfolio and work samples of this Washington, D.C.-based photographer. [Exp. #169.]

Joshua Chang's Free Online Term Papers *http://members.tripod.com/~joshchang* Do you want quality free term papers? [Exp. #170.]

Leach Company *http://www.LeachUSA.com* Manufacturer of refuse collection equipment. [Exp. #169.]

Leading Edge Solutions, Inc. *http://www.sgmp.com/ntr/kvnrdckr* The source for Internet retailing. [Exp. #169.]

LeaseSource *http://www.leasesource.com* Consumer automobile leasing information, referral sources, and utilities. [Exp. #169.]

Madison Cycles Home Page *http://ourworld.compuserve.com/homepages/madisoncycles* The #1 distributor of cycling products in the United Kingdom. [Exp. #171.]

Make Extra Money From Home Instantly! *http://totalmarketing.com/cyberniche* Our home-based computer Internet business will allow you to make money instantly. No computer or experience required. [Exp. #169.]

Manly Blades *http://www.manlyblades.com.au* Manly Blades is a retail inline skate and skateboard shop situated on the picturesque beachfront in Manly. [Exp. #169.]

Marcus J. Leathers *http://www.jps.net/maj* Selling leather garments, boots, and accessories at low prices. [Exp. #171.]

McNee Productions, Inc. *http://mcnee.com* Houston-based film and video tape production with over 28 years of experience. [Exp. #169.]

Medical Devices Ltd. *http://www.mdevices.com* A leading manufacturer of quality Laryngoscopes and Otoscopes both conventional and fiber optic. [Exp. #169.]

Mercedes-Benz North America *http://www.mbusa.com* Mercedes-Benz Official US Web site. [Exp. #171.]

Metalworking Lubricants Co. *http://www.metalworkinglubricants.com* Metalworking Lubricants Company manufactures and markets hundreds of products. [Exp. #170.]

MooreStuff Store *http://www.wimall.com/moorestuff/* Online shopping experience offering everything for sale! [Exp. #170.]

New York Plastic Surgery Associates *http://www.nypsa.com* Cosmetic surgery group practice. [Exp. #169.]

Oceatac-Underwater And Offshore Construction Experts *http://www.interem.net.mx/oceatec* Oceatec has 10 years of experience performing underwater and surface inspections, construction and maintenance. [Exp. #171.]

Palo Alto Software, Inc. *http://www.palo-alto.com* Palo Alto Software develops, markets, and supports a line of applications designed to produce sucessful business and marketing plans. [Exp. #169.]

Pandora & Pendragon Body Adornments *http://panpen.com* Custom jewelry in sterling and gold with precious stones and gems for fetish, gothic, fantasy, piercing including slave collars, cuffs, chains, and pendants of every sort. [Exp. #171.]

Paramax, Inc. *http://www.paramax.net* Developers of electronic products. [Exp. #169.]

Personal And Executive Coaching *http://www.paxconsulting.com/coach.html* Coach Peter Fahrenkamp has coached people successfully since 1992 in the US and Europe. [Exp. #170.]

Personalized Coffee Mugs *http://www.mugmerchant.com* Name plus up to three lines of type from $5.95 plus shipping and handling. A wonderful gift. [Exp. #170.]

Planet Health: The Best Of Health *http://www.planet-health.com* Planet Health is a powerful health information and decision-making system. [Exp. #171.]

Posie Peddler Florist *http://posiepeddler.com* Specialty roses, fruit and gourmet baskets, balloons, tropicals, exotics, worldwide delivery. Charge by phone. [Exp. #170.]

PowerCom Australia Home Page *http://gil.com.au/comm/power/index.htm* Lightning, power, and data communication protection products for the electrical/electronics Industry. [Exp. #169.]

Preferred Customer Plan *http://asktom-naturally.com/homebiz/bgmproducts.html* Affordable nutrition suppliments. [Exp. #171.]

President/Owner *http://www.tssolutions.com/voss.htm* Environmentally safe household products. [Exp. #169.]

Print-Tech Printing Services *http://www.print-tech.net* Fantastic deals in printing and promotional products! [Exp. #170.]

Publishers Depot *http://www.publishersdepot.com* Stock photography online store. Creative professionals can license and download over 500,000 premium images. [Exp. #169.]

Pyramid Tile Company *http://www.pyramidtile.com* Get your tile installation questions answered on the Internet. Ask Mr. Tile. [Exp. #169.]

RadiKahl's Environment *http://www.geocities.com/RainForest/8865/* Alexander Kahl Environmental Consulting Services: develop scientific software applications. SF/Bay Area environmental links. [Exp. #169.]

RDT Development *http://www.rdt.dk* Development and sales of tele-equipment. [Exp. #169.]

Rent-An-Inventor *http://www.rent-an-inventor.com* Helping companies create products from concept to completion. [Exp. #170.]

RG Services *http://www.wimall.com/rgservices* Online shopping mall. [Exp. #169.]

Ridgewood Cottages *http://www.onlink.net/cybermall/ridcot* [Exp. #169.]

Roland, Inc. *http://ourworld.compuserve.com/homepages/wroland* Quality CNC screw machine products. [Exp. #170.]

Royal Citrus Company *http://home.earthlink.net/~dbailey7/oranges.html* Growers, packers and shippers of Sunkist citrus worldwide. Riverside Ca, open to public. [Exp. #171.]

Skidmore, Owings & Merrill LLP *http://www.som.com* Architecture, engineering, planning, and interior design. [Exp. #169.]

The Stockhouse, Inc. *http://www.stockhouse-houston.com* Stock photography, Texana, southwest photography, oil and gas. [Exp. #169.]

Strategic Sourcing, Inc. *http://ssourcing.com* Charlotte-based information technology consulting and recruiting firm. [Exp. #169.]

continued on page 186

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- Keytronic 104 Windows 95 Keyboard
- Logitech Mouseman 3-Button Combo Mouse
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- Qtronix 104 Windows 95 PS-2 Keyboard
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- Diamond Stealth 3D Virge 4MB EDO DRAM w/MPEG Screaming 64–Bit Graphics
- Axion 17".28NI 1280x1024 65Hz Windows 95 Plug & Play Monitor
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- Logitech 3-Button Mouse
- Deluxe Medium Tower Case 250W Power Supply
- Toshiba IDE 24X 90ms 3600KB CD–ROM
- Creative Lab Awe 64 Value PnP Stereo Sound Card
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- 32MB 60NS EDO RAM up to 128MB
- Adaptec 2940/7880UW Ultra Wide PCI SCSI Controller
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- 2 Hi-Speed (16550 Fast UARTS) Serials & 1 Enhanced Parallel
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- Diamond Stealth 3D Virge 2MB EDO DRAM w/MPEG Screaming 64–Bit Graphics
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AMD K6-233/200MMX	$1,212/$1,137
AMD K6-166MMX	$1,019
Cyrix 6x86-P166	$920
Pentium® Processor-233MMX	$1,302
Pentium® Processor-200MMX/200	$1,130/$1,129
Pentium® Processor-166MMX/166	$1,022/$1,018
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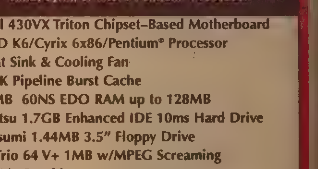

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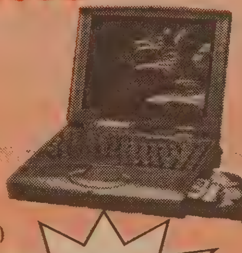

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Matrox Mystique PCI/4MB SGRAM Video Card
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Archtek 33.6 Internal Fax/Modem w/Voice (Rockwell Chipset)
Diamond Video 2121 PCI Video Card w/2MB EDO DRAM
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Sampo KM-511 15" SVGA .28mm Monitor (Dell OEM)
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MS Compatible Serial Mouse
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Diamond Video w/ 2MB EDO DRAM
Mini Tower Case 230W PS

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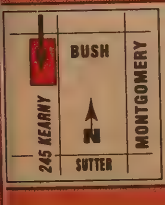

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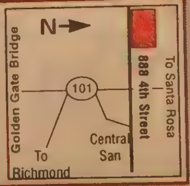

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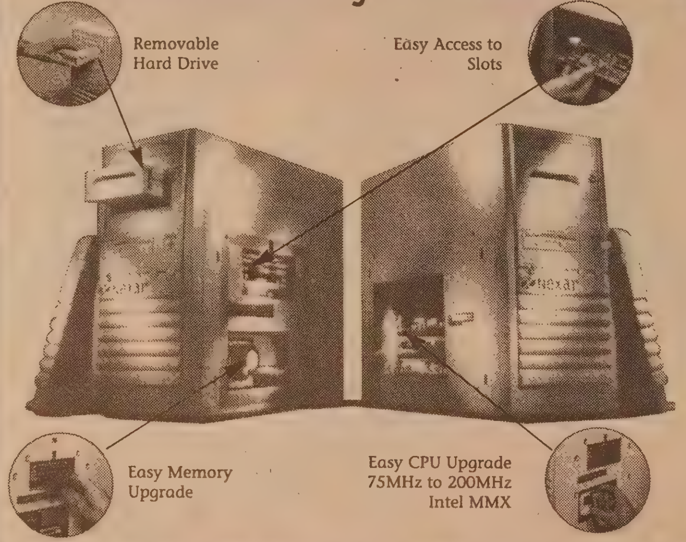

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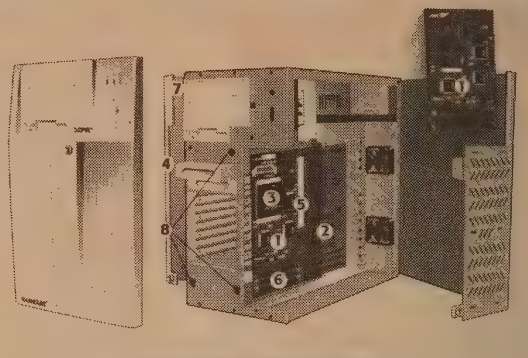
Nexar XPA^PC System



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- 64-Bit Sound Blaster P-n-P Sound Card & Stereo Amplified Speakers
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- 104 Key Windows 95 Keyboard
- PS/2 Ergonomic 2-Button Mouse
- Microsoft Windows 95 CD
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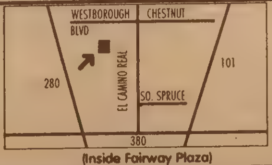

(Inside Fairway Plaza)

Web Page Listings

continued from page 180

Streamline International *http://www.cyber-action.com/oed/jfinch.html* A stress-free way to make a potentially large income through nutritional products. [Exp. #169.]

Thomas Regional On The Internet *http://www.thomasregional.com* Searchable database of 19 regional industrial buying guides. [Exp. #171.]

TMS Home Page *http://www.totalmarketing.com* Visit our 8,000 title catalog of special interest videos and CD-ROMs. [Exp. #170.]

Townsend Investigations *http://www.TownsendInvestigations.com* Investigative services including, skip tracing, domestic and business concerns, workplace violence issues, and business losses. [Exp. #170.]

Travelconexion *http://www.travelconexion.com* Travel industry suppliers, product promotions and services. [Exp. #171.]

Treasure Baskets To Go *http://www.tb2go.com* Eight years of experience meeting the needs of gift-givers with a variety of gift baskets and innovative gift ensembles. [Exp. #171.]

Tropicare, Inc. *http://www.panda.demon.nl/Tropicare/index.htm* Dental and medical equipment. [Exp. #170.]

Twin Peaks Gourmet Trading Post *http://tpeaks.com* An online food store with over 200 delicious fancy foods to choose from. [Exp. #170.]

Union Made *http://www.unionmade.com* Ad specialties and promotional products, imprinted wearables, drinkwear, pins, jewelry, and more. [Exp. #169.]

Viable Herbal Solutions *http://www.viable-herbal.com/* Alternative medicine herbal health products and services. [Exp. #170.]

Victory Labs Supplements *http://purevictory.com/* Pure pharmaceutical grade vitamins and supplements available to the public. [Exp. #171.]

Walkeralls: Adamo Industries, Inc. *http://www.walkeralls.com* Aids to daily living. [Exp. #169.]

Webley Systems, Inc. *http://www.webley.com* Personal communications systems incorporating voice activation, speech and text recognition, telephone and Internet access, and an ever-expanding array of features. [Exp. #170.]

WeddingView *http://www.weddingview.com/wv* Present your wedding album online for friends and family. The service also offers pre-nupital announcements and choices of formats for albums. [Exp. #169.]

Welcome To Model Office *http://www.modeloffice.com* Home page of Model Office, Inc. [Exp. 169.]

Woodturning: Treasures From Trees *http://www.indy.net/~woodturn* Woodturnings, woodturning, and lathe-related site by Dick Gerard, including a gallery of woodturning for sale. [Exp. #171.]

Your Gateway To World Profit *http://www.globalassoc.com/* Business opportunities, world trade directories, how-to-books, Web wealth & Internet consulting. [Exp. #169.]

Your Travel Partner In Holland, Belgium, And Luxembourg *http://www.mbtravel.nl* Travel services for individuals and group travellers—for pleasure as well as for business. [Exp. #169.]

FINANCIAL/ REAL ESTATE SERVICES

Affordable Mortgage, Inc. *http://www.affordablemortgageinc.com* The name says it all. [Exp. #169.]

All Real Estate Ads *http://www.mswebmasters.com/land/* Interactive classified system listing homes for sale, businesses, farms, ranches, timeshare, farmland, condos, townhomes, orchards, rental property, all types of real estate. [Exp. #171.]

American Home Listing, Inc. *http://ahl2000.com* The premier listing service for people to sell their own home on the Internet. [Exp. #169.]

Applied Business Software, Inc. *http://absnetwork.com* Software for the real estate lending professional. [Exp. #169.]

Asian Financial News From India to Japan *http://www.indoexchange.com/afx* Full financial news stories covering all of Asia from India to Japan to China. [Exp. #170.]

Atlantic Porperties International *http://www.atlantic-props.com* Ft. Lauderdale/Miami real estate. [Exp. #170.]

Blizzard Processing *http://www.blizzardprocessing.com* A/P outsourcing. [Exp. #170.]

Bradley Bertchie & Company *http://www.bb-c.com* Certified Public Accountants. [Exp. #169.]

Coldwell Banker Carl Conelly Realtors *http://www.cbsantacruzhomes.com* Real estate since 1934 specializing in rural, commuter, and estate homes, plus lots and acreage. [Exp. #171.]

Competence Software *http://www.competencesw.com* Highly rated and widely used interactive, multimedia training on investments and business finance. [Exp. #169.]

CVAR Web Site *http://www.cvar.com/* Conejo Valley Association of realtors. [Exp. #170.]

Debt Consolidation *http://www.beevy.com/cfs/consolidate?45-9041* Help available for people who need a debt consolidation loan. No application fees. [Exp. #171.]

Dee Dee Nadler—Realty Executives *http://www.goodnet.com/~buyaz* Look no further! Scottsdale, Paradise Valley, and Phoenix real estate information. Dee Dee offers the very best in real estate and relocation. [Exp. #170.]

Hampton Roads Mortgage Link *http://www.mloans.com* Providing mortgage loan services for the home buying public. [Exp. #171.]

Howard Perry & Walston / Better Homes & Gardens *http://triangle-hpw.com* Real estate marketing in North Carolina from the Triangle area to the Coast! [Exp. #171.]

ICI Mutual Fund Connection *http://www.ici.org* Legislative, regulatory, economic, and educational information about mutual funds. [Exp. #169.]

Indiahomes *http://www.indiahomes.com* Indian real estate and property investment. [Exp. #170.]

Michael Gray, CPA *http://www.innetix.com/~mgraycpa* Issues presented by new tax laws and how to organize your tax information for next year. [Exp. #170.]

National Discount Brokers *http://www.ndb.com* Online trading system. [Exp. #169.]

Nicholson Century 21 *http://www.c21nicholson.com* Real estate broker. [Exp. #169.]

Personal Finance *http://www.geocities.com/wallstreet/floor/4551/blemieux.htm* Learn basic personal finance. [Exp. #171.]

Real Estate Diversified—Coldwell Banker/The Hucthinson-Freitas Group *http://www.tiac.net/users/joegold/freitas.html* Comm-inv and residential site, town of Easton, MA, and interactive links. [Exp. #170.]

REI.Net *http://rei.net* REI.NET is the real estate info net, a Web site where you can find helpful information about buying and selling real estate, calculate your monthly payment for a mortgage, and find many types of properties that are for sale. [Exp. #169.]

RMC Stock Price Forecasting *http://www.fastgain.com* Daily updates of price forecasts on 9,000 NYSE, AMEX, and OTC stocks, with precise targets of expected near-term price movements. [Exp. #169.]

SFVAR Web Site *http://www.sfvar.com* Southland regional association of realtors. [Exp. #170.]

StockSplits.com *http://www.stocksplits.com* Stock split announcements. [Exp. #169.]

Strategic Selections *http://www.geocities.com/wallstreet/floor/1475* The Internet's top selling stock market newsletter. Sent exclusively via email. [Exp. #170.]

Tactical Asset Allocation *http://www.geocities.com/wallstreet/9250* Provides advice concerning which investments to emphasize based on current market conditions. [Exp. #171.]

Topanga Canyon Real Estate *http://www.topangacanyon.com* Comprehensive guide to real estate buys in this famous community by Topanga's leading brokerage, Coast & Canyon Realtors. [Exp. #171.]

Welcome To Resource Consolidation *http://resource-consolidation.com* Debt consolidation, your alternative to bankruptcy. [Exp. #169.]

LEGAL SERVICES

Claimtronics Network *http://claimtronics.com* A complete transportation claim processing service dedicated to the household moving industry. [Exp. #171.]

Computer Litigation Specialists *http://www.wsrcg.com* Consulting firm specializing in high technology and computer litigation support. [Exp. #171.]

David S. Kahn, Attorney At Law *http://www.verdict.com* Online legal information for people who have been arrested, are being evicted, have been in an accident, and who want information regarding Small Claims Court. [Exp. #170.]

Delaware Intercorp *http://www.del.net/biz/incorp/* Delaware registered agent and incorporation service for Limited Liability Companies and Corporations. [Exp. #169.]

First Legal Resource *http://www.findanattorney.com* Southern California's most complete Internet attorney directory. [Exp. #171.]

Law Offices of John R. Kahn *http://members.tripod.com/~jkahn/index.html* Attorney handling Computer, Bankruptcy, and Real Estate law, and transactional matters in San Jose, CA. [Exp. #169.]

Law Offices Of Karen K. Greig *http://www.kkglaw.com* Personal injury attorney for the 21st century—great use of technology for the benefit of clients. [Exp. #171.]

Richard J. Greenstone, Attorney at Law *http://www.rjg.com/rjg* Copyright, trademark, licensing, business, and transactional law for the computer, entertainment, and publishing industries. [Exp. #169.]

Walsh & Katz *http://www.welshkatz.com* A full-service intellectual property law firm. [Exp. #171.]

You Can Adopt *http://www.youcanadopt.com* Law firm limited to adoption and surrogacy. [Exp. #169.]

EMPLOYMENT/ EDUCATION

Acumen Systems *http://www.acumensystems.com* Excellent and affordable computer training and education. [Exp. #171.]

Altos Education Network *http://www.altosnet.com* Web-based education for entrepreneurs. [Exp. #169.]

Ascolta Training Co. *http://www.ascoltatraining.com* Training: Cisco, Microsoft, Novell, Netscape, Internet/intranet certified engineer. [Exp. #169.]

Aspect International Language Schools *http://www.aspectworld.com* Language programs, study abroad, work study, high school and college exchange programs, and university placement. [Exp. #169.]

CAUPA *http://www.geocities.com/wureka/4648* A unique source for job seekers and established employees. [Exp. #171.]

Certificate II Firefighting Operations *http://www.tafensw.edu.au/oten/fire* A Web site to support distance students in the course offered by the Open Training and Education Network (OTEN), Australia. Elements of the site include course information, learning resources, a forum for students and teachers. [Exp. #169.]

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- Multimedia Microphone
- ATX Medium Tower Case w/PS
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- Joystick

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PENTIUM® SUPERIOR SYSTEM

- Intel Portland Motherboard
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- Matrox Millennium II 4MB WRAM
- Teac 1.44 Floppy Drive
- Toshiba 24X CD-ROM Drive
- Sound Card Built In
- Cirque Keyboard w/Touchpad
- ATX Medium Tower Case
- Altec Lansing Speakers w/subwoofer
- Window 95 w/Plus Pack
- Multimedia Microphone

233MHz	**$2099**
266MHz	**$2239**

MULTIMEDIA

Toshiba 15X SCSI CD-ROM Drive	$159
Toshiba 12X SCSI CD-ROM Drive	129
Mitsumi 8X CD-ROM Drive	79
Sound Blaster 16	59
Sound Blaster 64	99
Stereo Speakers	from 10

TV - VIDEO CAPTURE

Micro Video Capture	$279
Connectix Quickcam Color	239

NOTEBOOKS

NEC	CALL
Toshiba	CALL
AST	CALL

CASES

Mini Tower Case w/PS	$55
Baby AT Case w/PS	65
Mid-Tower w/PS	65
Full-Tower w/PS	85
ATX Mid-Tower Case	90
ATX Full-Tower	119
Server Tower w/Dual Fan & 250W PS	109

VIDEO CARDS

MGP Card	$15
Stealth 64, 3D EDO 2MB/4MB	59/89
Stealth 2/4MB VRAM 3D	149/169
Matrox Mystique 2MB SG RAM	105
Matrox Millennium I 2/4MB	149/179
Matrox Millennium II 4MB	239

KEYBOARDS

Maxi Nova	$25
Keytronic	30
Focus 2001	35
MS Natural Keyboard	75
Cirque Glidepoint Keyboard	99
Keytronic Wireless Keyboard	89

HARD DRIVES

1.2GB IDE	$169
1.6GB IDE	179
2GB IDE	200
2.5GB IDE	215
3GB IDE	235
4GB IDE	299
2GB SCSI	249
4GB SCSI	779

CALL FOR OTHER HARD DRIVES

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Amber 14"	$95
VGA Mono	99
SVGA NI 1024x768 .28dp	195
ADI E40 1280x1024 .28dp	319
ADI 5P	519
MAG DX700T	689
Sony 100SX	379
Sony 200SX	719
Nanao T2-17TS	945

MICE

3-Button Mouse	$10
Logitech 2-Button	22
MS Mouse/Bus	49/79
Logitech Mouseman/Bus	39/69
Logitech Marble Trackman	85
Kensington Expert Mouse	99
Alps GlidePoint Mouse	69

CONTROLLERS

IDE Controller 2FD/2HD	$15
IDE I/O Controller	18
Promise 2300 Plus	59
Adaptec 2842VL SCSI	239
Adaptec 2940 PCI SCSI	199
Adaptec 2940U Wide SCSI	259

MOTHERBOARDS

Mari M/B w/512K Pipeline Burst	$119
Pentium®-150 PCI w/CPU	215
Pentium®-166MMX w/CPU	269
Pentium®-200MMX w/CPU	379
Pentium® Pro 200 PCI w/CPU	679

PRINTERS

Hewlett Packard

Deskjet 870CX7	$399
Laserjet 6L	399
Laserjet 6PXi	799
Scanjet 5P	299
Laserjet 5	1059

MODEMS

US Robotics 33.6 Int./Ext.	$99/169
US Robotics 56.6 Int./Ext.	179/209
US Robotics 33.6 PCMCIA	249
Zoltix 33.6 Int Fax Modem	70

TAPE BACKUPS

Colorado 4000S Int	$399
Colorado 3.2GB Int	179
Iomega Zip Drive IDE Int.	125
Iomega 1GB Jaz Drive Ext	399

NETWORKING

8-Port Hub	$79
16-Port Hub	199
3COM 8-Port Hub	139
3COM 3C509 T/P/Combo	59/89
3COM 3C509 PCMCIA 10BT/Combo.	165/215
3COM 3C900TP/3C900C.	69/90
3COM 3C905.	79
SMC Elite Combo	95

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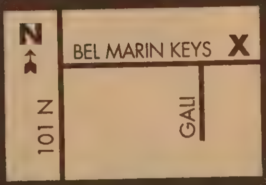

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Web Page Listings *continued...*

Computer Recuiters, Inc. *http://la.e2100.com/home/bobmoore* Specializing in data processing positions: programmers, database administrators, network administrators, etc. Full-time and contract. [Exp. #170.]

Computer Technical Training *http://www.compuedge.com* Hands-on technical development training. [Exp. #169.]

Decolonization *http://www.trincoll.edu/~decol/* Decolonization: Painful Transitions in the Cold War Era. Trinity College, 1997-1998 program. [Exp. #171.]

EduTech *http://www.edutech-1.com* The largest online listing of K-12 certified and classified jobs in California education on the Net. [Exp. #171.]

Experts Only Productions *http://www.choicemall.com/crashcourse* A quick and easy way to learn about the Internet. [Exp. #169.]

Hotel Institute Montreux *http://www.him.ch* One of Switzerland's leading Hotel School of Hospitality Management. Instruction in English. [Exp. #170.]

How to Find Permanent Employment Through Temporary Services *http://members.cruzio.com/~frankj/* HTML manual for sale, based on author's personal experience using temporary services. [Exp. #169.]

International Academy For Peace Education *http://www.best.com/~iape/home.html* Not just another peace initiative—innovative, community-building. [Exp. #169.]

The Lancaster Group *http://www.the-lancaster-group.com* Executive and technical search, [Exp. #171.]

LANOP CNE And MCSE Training *http://www.accesscom.com/~seekers/lanop.htm* CNE and MCSE training wth a guarantee and the lowest possible prices. [Exp. #169.]

Math Exercises *http://rbbbs.cnchost.com* Online math exercises for grade 8-12; introducing a unique math exercise software (WonderMath). [Exp. #169.]

Minorities Job Bank *http://www.minorities-jb.com* The first jobs Web site to target all people of color. Each village has content related to the interests, concerns, problems, and opportunities of each ethnic community. [Exp. #171.]

Networking Jobs In Northern California *http://www.pcpersonnel.com* We specialize in the placement of computer networking professionals using Windows NT, Novell Netware, and UNIX networks. [Exp. #170.]

Nicaraguan Spanish Schools *http://pages.prodigy.net/nss-pmc* With offices in California and Nicaragua, our intention is to help develop eco-tourism in Nicaragua and create jobs for Nicaraguans by offering the highest-quality Spanish instruction in the most stimulating and interesting settings in Nicaragua. [Exp. #170.]

Smart And Smarter & Mystery Theater *http://www.smartandsmarter.com* Interactive geography and educational site. [Exp. #171.]

Virginia Woolf On Women And Fiction *http://www.cygneis.com/woolf* A distance-learning project. [Exp. #169.]

ORGANIZATIONS

American Academy of Pediatric Dentistry *http://aapd.org* WWW site of premier children's dental advocates. [Exp. #169.]

American Business Council Of Dubai & The Northern Emirates *http://www.abcdubai.com/* The ABC is a nonproft organisation of Americans and American companies based in Dubai, United Arab Emirates. [Exp. #170.]

ASHHRA *http://www.ashhra.org* ASHHRA supports the development of human resources practitioners in health care. [Exp. #170.]

California Credit Union League's Banker Attack. *http://www.ccul.org/attack/attack.htm* Designed specifically to toss the arguments from banking industry attacks on credit unions back in the laps of the bankers. [Exp. #170.]

Catholic Books Online *http://www.catholicbooks.org* The Web's largest nonprofit Catholic bookstore. [Exp. #169.]

CHLB's Home Page *http://homepage.usr.com/c/camaron* Commodore 128/64 and Apple II family user group Web site. Come join us. [Exp. #169.]

Insulin-Free World Foundation *http://www.insulin-free.org* For people with diabetes and for others interested in pancreas transplants, islet transplants, immunology and xenotransplantation as they relate to diabetes. [Exp. #171.]

International Myeloma Foundation *http://www.myeloma.org/* Dedicated to improving the quality of life for myeloma patients while working towards prevention and a cure. [Exp. #169.]

LA-VRML User Group *http://www.westworld.com/~bvirtual/lavug/* [Exp. #169.]

Middle East Childrens Alliance *http://www.peacenet.org/meca* Summer 1997 virtual delegation to Palestine and Israel. [Exp. #171.]

National Center For Employee Ownership *http://www.nceo.org/* Articles, columns, discussions, and interaçtive training on employee stock ownership plans, stock options, etc. [Exp. #170.]

Network Professionals Resource Center *http://www.inetassist.com* For network professionals and others that want to learn more about computer networking and telecommunications. [Exp. #169.]

New York Hospital Medical Center Of Queens *http://www.nyhq.org* A state-of-the-art primary and tertiary care hospital. [Exp. #169.]

NOCCC (North Orange County Computer Club) *http://www.noccc.org* Web page of computer user group. Meetings: 1st Sunday of the month, 9:00 am, Chapman University, 333 N. Glassell Ave., Orange. [Exp. #170.]

North Shore Hematology/Oncology Associates, P.C. *http://www.mindspring.com/~nshoa* Suffolk County's oldest cancer treatment facility. [Exp. #171.]

Northern County Psychiatric Associates *http://www.ncpamd.com* Information about our group and useful mental health links for primary care physicians and the general public. [Exp. #171.]

Orange County NetWare Users Group *http://www.computerquest.com/cns/ocnet/* Web site that lists meeting topics, dates, and membership info. [Exp. #169.]

PAACT—Patient Advocate for Advanced Cancer Treatment *http://www.osz.com/paact* Non-profit support group for prostate cancer. [Exp. #170.]

PC Clubhouse *http://www.pcc.org* For people interested in learning more about IBM-compatibles. [Exp. #171.]

PFSA *http://www.pfsa.org* A non-profit professional organization of fleet managers, supervisors, and technicians serving the greater SF Bay Area and Northern California. [Exp. #169.]

Riggs Institute *http://www:riggsinst.org* A non-profit publisher and agency promoting literacy and offering aides and tools to teachers, parents, and tutors of students wanting to improve their English reading and writing skills. [Exp. #170.]

San Francisco Recreation And Parks Department *http://www.ci.sf.ca.us/recpark/* [Exp. #171.]

Scripture Resource Center *http://scriptureresources. org* Catalogue of various translations and versions of Scripture Media. [Exp: #171.]

SF Goodwill *http://www.sfgoodwill.org* Featuring its new 1977 award-winning advertising and public service announcement campaign. [Exp. #170.]

Silicon Valley Computer Society *http://www.svcs.org/sigs/inet.html* The Internet SIG of SVCS meets the first Monday of each month. [Exp. #171.]

Silicon Valley Localization Forum *http://www.tiziana.com/beta* Completely redesigned Web site. [Exp. #171.]

South Bay Apple Macintosh User Group *http://www.sbamug.org* Mac stuff and more. [Exp. #169.]

Technical & User Groups Network *http://www.tugnet.org* 24-hour bulletin board, meeting calendar, membership info., articles, reviews. [Exp. #171.]

United Jewish Appeal *http://www.uja.org* Promoting the UJA Federation Annual Campaign and other national activities including: University programs, National Women's Campaign, and its Mission to Israel. [Exp. #169.]

USS New Orleans Reunion Association *http://www.purevictory.com/orleans/index.html* Looking for old shipmates of the USS New Orleans. Visit the ship's reunion assn. page. [Exp. #171.]

Web Pages For Charities, Non-profits *http://www.rth.org/* Photos of La Brea Tarpits, LA Natural History Museum, Cabrillo Marine Aquarium and more. [Exp. #170.]

Webguardian Internet Watchdog Web Site *http://www.webguardian.com* Non-profit Internet watchdog group to assist the cyberconsumer with transaction problems or any Internet-related consumer matter. [Exp. #170.]

Witness For Peace *http://www.w4peace.org/wfp* Witness for Peace is a faith-based, politically independent, not-for-profit organization dedicated to acting in accordance with principles of nonviolence. Our mission is to change US policies which contribute to poverty and oppression in Latin America and the Caribbean and to promote just alternatives. [Exp. #171.]

ODDS & ENDS

Advanced Kinesiology Concepts *http://www.geocities.com/hotsprings/7756/* Innovative approaches to holistic health using advanced kinesiology, radionics, and huna. [Exp. #170.]

AirCal *http://members.aol.com/aircal737/aircal.htm* A great place for ex-AirCalifornians to get together. Reunion photos too! [Exp. #169.]

Ask The Master Plumber *http://www.clickit.com/bizwiz/homepage/plumber.htm* [Exp. #170.]

Assyrian Information Medium Exchange *http://www.edessa.com* Information relating to the contemporary Assyrian Christians around the world. [Exp. #169.]

Atlin Art Centre *http://www.atlinart.com* Art courses and wilderness adventures. [Exp. #169.]

Auto Pricing *http://www.autopricing.com* Providing dealer invoice and actual market pricing values on new 1998 to 1985 vehicles. [Exp. #170.]

Bruce Olsson *http://www.bruceolson.com* Colombia's Matilone Bari Indian community. [Exp. #170.]

Child-Teen Mental Illness Research *http://www.swiftsite.com/child-research* Parents who have children/teens with neuropsychiatric, neurodevelopmental, learning, or severe social-behavioral problems are invited to participate in research sponsored by the University of Illinois at Urbana-Champaign. [Exp. #169.]

ChinaVista *http://www.chinavista.com* Features in-depth information on China's business, industry, travel, and culture. Contents are available in both English and Chinese. [Exp. #170.]

Country Clubs Lifestyle Mall *http://www.countryclubs.com* Whether it's golf clubs, town clubs, country clubs, polo clubs, shopping or investments, we have it all. [Exp. #170.]

Dispute Resolution Specialists Home Page *http://www.mediates.com* Mediation and alternative dispute resolution services provider. [Exp. #169.]

Dr. Sara Feldman-Schorrig's Sexual Harassment Page *http://www2.netcom.com/~schorrig/psych.html* Calls attention to need for objectivity in sexual harassment cases. [Exp. #169.]

Empowerment Resources for Personal Growth, Social Change, And Ecology *http://www.empowermentresources.com/* Over 180 good books (most discounted 20-30%) and over 370 links on empowerment. [Exp. #171.]

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P6DNF / Dual Pro / AT	$329
P6DNE / Dual Pro / Baby AT	$316
P6SNS / UW SCSI / AT	$296
P6SNE / Pro / AT	$219
P5MMA 98 / 512K / ATX	$158
P5MMS 98 / 512K / AT	$156
P5MMA / 512K / ATX	$135
P5MMS / 512K / AT ...	$132

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MARL II (512K)	$109
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TUCSON/Audio, USB, Video	$216
VENUS	$139
VENUS/Audio	$147
PROVIDENCE	$450
PORTLAND	$239
PORTLAND/Audio	$256

ASUS

KN97X / Pentium II	$258
P6NP5 / P-Pro	$228
P65UP5 / Dual P-Pro	$446
TX97X / Audio	$190
TX97X	$168
TX97	$156
XP55T2P4	$145

TYAN

S1682D / Dual Pentium II	$329
S1668 Titan / Dual Pro ATX	$288
S1572 Titan ATX	$138
S1570 Titan AT	$138
S1563D / Dual P5 AT	$198
S1563 / AT	$145

VIDEO CARDS

ATI

Graphic XPression PCI 2MB	$65
Graphic 3D XPression PC2TV 2MB	$118
Graphic 3D XPression PC2TV 4MB	$138
3D Pro Turbo PC2TV 4MB PCI	$165
3D Pro Turbo PC2TV 8MB PCI	$216

DIAMOND

Stealth 64 PCI 2MB	$46
Stealth 3D 2000 PCI 4MB	$78
Stealth 64 Video PCI 2MB VRAM	$80
Stealth 64 3D 3000 PCI 4MB VRAM	$136
Stealth 64 Monster 3D PCI 4MB	$148
Fire GL 1000 PCI 8MB	$268

MATROX

Matrox Millenium PCI 2MB	$138
Matrox Millenium PCI 4MB	$189
Matrox Mystique PCI 2MB	$86
Matrox Mystique PCI 4MB	$136
Matrox Millenium II PCI 4MB	$256

SOUND CARDS

Sound Blaster 16 PnP	$42
Sound Blaster 32 PnP	$74
Sound Blaster AWE 64 PnP Value	$92
Sound Blaster AWE 64 Gold	$179

FAX MODEMS

SUPRA

Supra Express 33.6 Voice Int.	$58
Supra Express 56k Int.	$118

US Robotics

Sportster 33.6 Voice Int.	$98
Sportster 56k Voice Int.	$159
Sportster 56k Voice Ext.	$179

HARD DRIVES

IBM

4.3GB Ultra Wide SCSI	$468
9.1GB Ultra Wide SCSI	$1068

IOMEGA

Zip Drive 100MB SCSI Int.	$139
Zip Drive 100MB Parallel Ext.	$145
Jazz Drive 1.0GB SCSI Int.	$315

FUJITSU

1.7GB IDE	$168
2.1GB IDE	$182
2.5GB IDE	$198

QUANTUM

2.1GB Ultra DMA 33MB/s	$182
2.5GB Ultra DMA 33MB/s	$198
3.2GB Ultra DMA 33MB/s	$236
6.4GB Ultra DMA 33MB/s	$445

SEAGATE

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2.1GB IDE	$179
2.1GB Ultra SCSI	$498
2.1GB Ultra Wide SCSI	$520
4.3GB Ultra SCSI	$746
4.3GB Ultra Wide SCSI	$789
9.1GB Ultra Wide SCSI	$1248

WESTERN DIGITAL

1.2GB IDE	$157
1.6GB IDE	$168
2.1GB IDE	$179
2.5GB IDE	$198
3.1GB IDE	$216
4.0GB IDE	$285
2.1GB Ultra SCSI	$519
2.1GB Ultra Wide SCSI	$549
4.3GB Ultra SCSI	$668
4.3GB Ultra Wide SCSI	$695

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16X CD-ROM/IDE Drive
Adaptec 2940UW SCSI Controller
SVGA Card/2MB
3COM/3C905 10/100 PCI
Keyboard & Mouse
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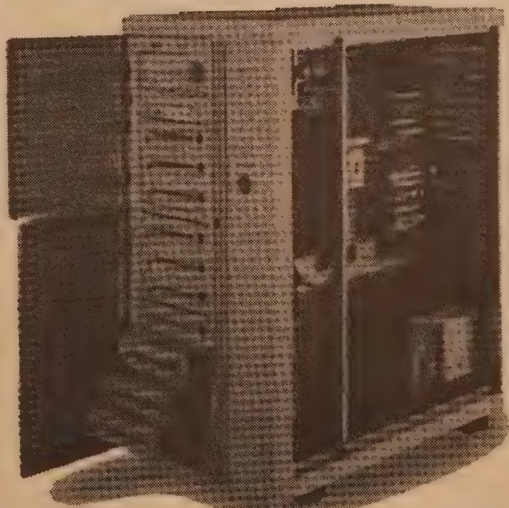

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Web Page Listings *continued...*

Guy Kawasaki's EvangeList *http://www.zdnet.com/macuser/macway/* Apple Fellow Guy Kawasaki has created a mailing list called "EvangeList," a place where Mac users can share stories and information about the platform, the industry, the state of mind that is Macintosh. [Exp. #170.]

Hair Loss Treatment That Works *http://www.hairsite.com* World's largest Web site for hair loss info and reviews. [Exp. #169.]

Healing Touch Ministries *http://healingtouch.com* Spiritual guidance for the gay community. [Exp. #169.]

Health By Choice *http://www.healthbychoice.com* Health care advisory. [Exp. #170.]

Jesus Christ, The Son Of God *http://www.jesusmessiah.com* The shocking truth about Jesus Christ. What most churches are not telling you. [Exp. #170.]

ManilaNet.com *http://www.manilanet.com* Asia's first 24-hour email-a-prayer ministry, counseling, and public service Web site. [Exp. #169.]

Manuel Otero Inmobiliaria Vende *http://webs.satlink.com/usuarios/o/otero* Business Inmobiliarios. Nos especializamos en residencias, countries, bodegas, vides, urbanizaciones e industrias. Asesoramiento en ley de inversiones para Argentina. [Exp. #170.]

Meet Cool California Singles Online *http://romanceclub.com* Stop dreaming, and start acting! Singles with photos and detail profiles. [Exp. #171.]

Movo Media *http://www.movo.com* Meet local singles. Try it free, use code 850. [Exp. #169.]

Nightscaping *http://www.nightscaping.com* One hundred pages about 12v outdoor lighting. [Exp. #169.]

Plastic Surgery Interactive Resource Page *http://users.aol.com/jdisaia* Free information for those contemplating cosmetic surgery and "To Answer Your Questions." [Exp. #169.]

Positive Health Clinic *http://www.indiawatch.org.in/positivehealthclinic* Homeopathic Cyber Clinic with online consultation. [Exp. #169.]

Quest for Anabolic Comprehension *http://www.networkx.net/qfac* Bodybuilding. [Exp. #171.]

Remarkable Medicinal Herbs for All *http://www.webexpert.net/takao/index.html* All natural products for preventive and therapeutic features. [Exp. #169.]

Sacred Journey *http://home.ncsi.net/sspears* This site is for the growing number of people around the world interested in spirituality. [Exp. #171.]

Scuba Sandwich *http://www.choicemall.com/scubasandwich* All the ingredients for great scuba diving between two slices of bread. [Exp. #169.]

Sunshine International Penpals *http://sunshine-girls.com/* Asian women desire romance, marriage. World's largest correspondence service since 1984. Free photo-brochure. [Exp. #169.]

Threshold Of The Twelve Galaxies *http://members.tripod.com/~heReTiK/* A place of peace, faith, and commitment. OS/2 is not dead. [Exp. #169.]

Tu An Zen Temple *http://vinet.vinet.com/~tuanthienduong/* Zen meditation, in English, Vietnamese, and Chinese. [Exp. #170.]

Unlocking The Secret Of Life *http://www.wgn.net/~dicewars/* The solution to our origin and immortality—relative to the universe. [Exp. #170.]

USS Hopper Site *http://www.navsea.navy.mil/hopper/* This is the first destroyer and only the second Navy ship named after a woman. [Exp. #171.]

Women's Journals *http://www.slaydesign.com/wjomensjournals/* Read installment journals and view scanned pages from personal paper journals. Read women's private thoughts. [Exp. #169.]

GOVERNMENT/ POLITICS

Bureau Economique en France *http://www.cotedivoire.co* Site officiel du Bureau Economique: Paris and Washington. [Exp. #171.]

California Government, Business & Education Tech Expo *http://www.techconf.co* October 1-3, 1997 at the Los Angeles Convention Center. Highlights technology solutions for the public sector with up to 12,000 government, business and education professionals expected. [Exp. #171.]

Child Support Reform Network *http://www.csrn.com* Devoted to changing a badly broken child support system so it is fair to everybody. [Exp. #170.]

Clean Car Maps *http://www.cleancarmaps.com/* Your best source for finding EV recharge and NGV refuel sites. Sponsored by CalStart [Exp. #171.]

Corporate Watch *http://www.corpwatch.org* As all the Fortune 500 companies jump onto the World Wide Web bandwagon, who's keeping an eye on them? Corporate Watch is! [Exp. #170.]

Democracy Direct *http://www.well.com/user/kr2/car15.html* Reclaiming democratic representative government by giving the national and state electorates a meaningful and direct voice (not the last word) in state and national government. [Exp. #171.]

First Amendment Center *http://www.fac.org* Congress shall make no law respecting an establishment of religion, or prohibiting the free exercise thereof; or abridging the freedom of speech, or of the press; of the right of the people peaceably to assemble, and to petition the government for a redress of grievances. [Exp. #170.]

Ken's Communist Comics *http://www.geocities.com/Area51/2369/kcc.html* The only communist comics shop in California. Our prices are Marxerific and the service is Maovelous! [Exp. #169.]

Library Of Congress Information Bulletin *http://www.www.loc.gov/loc/lcib* [Exp. #169.]

Milpitas Community Web Site *http://milpitas.miningco.com* The one site where Milpitans can find everything about Milpitas and Silicon Valley, CA. [Exp. #170.]

NAFED/BPEN Homepage *http://www.nafed.go.id* A service of NAFED, Ministry of Industry and Trade, Republic of Indonesia. [Exp. #171.]

Political Ecology Group *http://www.igc.org/peg* PEG is a multi-racial, volunteer-based organization working for environmental justice in the SF Bay Area. [Exp. #170.]

San Mateo County Sheriff's Office *http://www.smcsheriff.com* Employment opportunities and services available from the San Mateo County Sheriff's office. [Exp. #170.]

Threatened Plams Of Moapa Nevada *http://www.angelfire.com/nv/DesertFanPalms/index.html* A report on threatened native Nevada desert palm trees, Moapa Indian pleas, a petition, and pictures. [Exp. #170.]

US Consumer Information *http://www.pueblo.gsa.gov* Find the latest information from more than forty US government agencies. [Exp. #170.]

ARTS

An American Photographer In Southern Spain *http://www.angelfire.com/ca/fotografo* Soon local area photos, events, and my photos. [Exp. #170.]

CENTURYMAGE: The Memory Of The XX Century *http://www.centurymage.com* Final count down from the April 6th 1997, D-1000 to the 21st century offering artistic and unique photographies, dated and certificated by lawyers. [Exp. #169.]

Collectible Photo Guide *http://www.negraphics.com/~collectables* A free collectible and antique photo guide for sport and non-sport collectibles. [Exp. #171.]

Dale Erickson Photography *http://www.dephoto.com* Colorful scenic, travel, wildlife, and floral photography from throughout the USA. Stock photography and print sales. [Exp. #170.]

Dick Swanson Photography—An American Odyssey *http://www.swansonphotography.com* Dick Swanson is a photojournalist with more than 35 years experience covering editorial photo assignments for *Time, Life,* and *National Geographic.* Specializing in people and their culture. [Exp. #169.]

Eagle Wing Indian Art—Trading Post *http://www.eaglewingart.com/trading_post/tradingpost.htm* The Trading Post is a service for Indian art collectors/owners to list items they wish to sell on the Internet. [Exp. #170.]

Images Of The Sea *http://www.mwestermeier.com* Underwater photography exhibit featuring digital images by Mark Westermeier. [Exp. #170.]

James Wilcox ArtWeb *http://www.armory.com/~james* [Exp. #171.]

Ledbetter Lusk Gallery *http://www.llg.com* The primary focus of Ledbetter Lusk Gallery is the representation of and commitment to artists working in our region and the greater Southeastern US. [Exp. #170.]

Mansoor Amarna Collection *http://www.amarna.com* A collection of ancient Egyptian limestone carvings, some of which have been exhibited in museums around the world. [Exp. #169.]

Paradigm Group *http://www.paradigm-arts-group.com* A showcase of artworks by a select group of established and emerging artists. [Exp. #169.]

Photos By Lucia *http://home.earthlink.net/~Lucia/* Need a great photographer at reasonable prices? Check out the site of L.A. lens-woman Lucia. [Exp. #169.]

Poems by G.A. Lee *http://members.tripod.com/~GALee* The poetry of this sensitive and gifted poetess/orator is now on the WWW. Ms. Lee's verses are finely scuptured emotional statatements. [Exp. #171.]

Touches The Heart Art *http://members.aol.com/TchHrt/weber2.htm* Poster prints of petroglyphic art. Visa, MC, AmEx. [Exp. #170.]

Verlangieri Art *http://www.thebook.com/verlangieri* Art, antiques, and photography gallery. [Exp. #170.]

Vigovisiones *http://zonezero.com* Since 1986, a biennial event where invited artists photograph Vigo, a port city in the Spanish region of Galicia overlooking the Cantabric sea. [Exp. #170.]

Virtual Colony *http://www.virtualcolony.com* A place in cyberspace for artists, poets, and musicians. [Exp. #169.]

List Your Web Page

To list your Web home page for FREE, send us the name of your page/site, the URL (address), and a fifteen-word description. Also, please include a contact name and phone number for our reference only. Listings will run for three issues unless renewed. We reserve the right to select listings on a space-available basis and to edit those listings as needed. Send us your listings to: *michael.robin@microtimes.com* ; Web Listings, 3470 Buskirk Ave., Pleasant Hill, CA 94523; or fax to (510)934-0883.

For information about placing a mini-display paid advertisement within the Web Listings section, please contact:

Sam Louis (510)934-3700
Northern California
Michelle Rosendin (213)851-8600
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Make sure you're part of this important resource to generate the sales that will make your fourth quarter a success! Complete and sign the attached reseller poll form and mail or fax it back by October 1, 1997.

** Figures based on data compiled through an independent reader survey, conducted by Research USA, Inc., May 1995.*

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9th Annual Reseller Poll

Mail to: **Reseller Poll**
3470 Buskirk Ave., Pleasant Hill, CA 94523
Fax: (510) 946-2972
Deadline: October 1, 1997

Please use separate forms for multiple store locations

Store Name: ____________________
Store Manager: ____________________
Address: ____________________
City: __________ **State:** __________ **Zip:** __________
Phone: __________ **Fax:** __________
email: __________ **URL:** __________

What is your specialty?
Stores:

☐ CD titles
☐ Computer hardware
☐ Desktop publishing
☐ Entertainment
☐ Mobile office
☐ Multimedia
☐ Networking
☐ Notebooks
☐ Peripherals
☐ Repairs
☐ Service bureau
☐ Small office/Home office
☐ Software
☐ Software development
☐ Training
☐ Video
☐ **Internet provider:**
  ☐ Business services
  ☐ Co-location
  ☐ High-speed access
  ☐ Web page development

List your top 2 specialties and in-house expert for each:

Specialty	**Expert**
1. __________	__________
2. __________	__________

What software operating systems does your business support?

☐ Windows NT ☐ Windows 3.X ☐ Windows 95 ☐ MS-DOS ☐ UNIX ☐ Macintosh ☐ Novell ☐ OS/2 ☐ Other

What special value-added services (e.g., service, training, support, warranties, return policy, etc.) does your business offer? *(Please keep responses under 25 words or we will edit them to fit available space.)*

____
____
____

Are you a vendor-authorized sales, service, training, and/or support source?
If so, please list up to three vendors (e.g., Apple, IBM, Novell, Hewlett-Packard, Compaq) who have authorized your business to provide these services, and check the areas for which you're authorized.

Vendor	**Sales**	**Service**	**Support**	**Training**
1. __________	☐	☐	☐	☐
2. __________	☐	☐	☐	☐
3. __________	☐	☐	☐	☐

I certify that all the statements made in this survey are true.

Name: __________ **Signature:** __________
Title: __________ **Date:** __________

Product Spotlight

Updates

Blue World Communications, Inc., has shipped **Lasso 2.0** for Macintosh. $399. Blue World Communications, Inc., (425)646-0288, *info@blueworld.com* , or URL: *http://www.blueworld.com* .

Celeritek, Inc., has announced the **Triniti DX Power Amplifier**. Celeritek, Inc., 3236 Scott Blvd., Santa Clara, CA 95054. (408)986-5060, or URL: *http://www.celeritek.com* .

Class PIO Partners has released **Classic Fabrics Collection**, a two CD-ROM set. $99.95. Classic PIO Partners, 87 East Green St., Ste. 309, Pasadena, CA 91105. 1-800-370-2746, or *classicpio@aol.com* .

Individual Software, Inc., has made available **ResumeMaker Deluxe**. $39.95. Individual Software, Inc., 5870 Stoneridge Dr., #1, Pleasanton, CA 94588. (510)734-6767, *info@individualsoftware.com* , or URL: *http://www.individualsoftware.com* .

JES Hardware Solutions is now offering the **Nakamichi 16X, 5-Disc CD-ROM Mini-Changer**. JES Hardware Solutions, 1-800-482-1866, or URL: *http://www.jessolutions.com* .

Lifetime Memory Products, Inc., has begun shipping **memory upgrades** for Apple's **PowerBook 3400**. Lifetime Memory Products, Inc., 4 Hutton Center Dr., Ste. 100, Santa Ana, CA 92707. (714)444-4700, *sales@lifetimememory.com* .

LucasArts Entertainment Co. has announced their latest "Desktop Adventure," **Yoda Stories**. LucasArts Entertainment Co., P.O. Box 10307, San Rafael, CA 94912. (415)472-3400, *info@lucasarts.com* , or URL: *http://www.lucasarts.com* .

MicroStrategy has released **DSS Web 5.0**. MicroStrategy, 8000 Towers Crescent Dr., Vienna, VA 22182. (703)848-8600, *info@strategy.com* , or URL: *http://www.strategy.com* .

Spider Island Software has announced **Telefinder Internet Server v5.5**. Spider Island Software, 4790 Irvine Blvd., Ste. 105-437, Irvine, CA 92720. (714)453-8095, or URL: *http://www.spiderisland.com* .

Sun Microsystems, Inc., has unveiled **Java Card 2.0**. Sun Microsystems, Inc., 2259 Garcia Ave., Mountain View, CA 94043. 1-800-786-0404, or URL: *http://www.sun.com* .

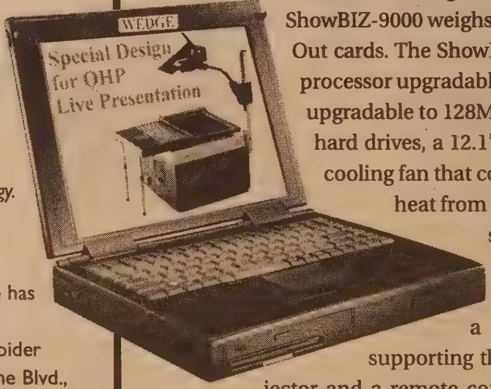
Synaptek Software has made available **Zip Wizard Pro 2.0**. $29.95. Synaptek Software, (905)276-8835, *info@zipwiz.com* , or URL: *http://www.zipwiz.com* .

Template Graphics Software, Inc. (TGS) has shipped **3Space Assistant v2.0 for Windows**. $150. TGS, 9920 Pacific Height Blvd., Ste. 200, San Diego, CA 92121. (619)457-5359, *info@tgs.com* , or URL: *http://www.tgs.com* .

Product Announcements

Laptops

ShowBIZ-9000 Notebook

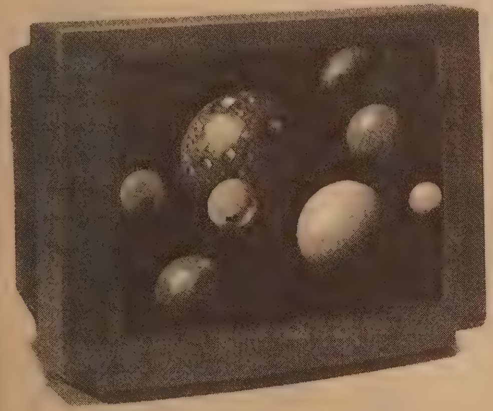


Wedge Technology Inc. has announced the ShowBIZ-9000, a 200MHz, MMX multimedia presentation notebook PC with an LCD that converts into an overhead projection panel that allows the user to project video as well as still images up to 6' high on a screen or wall. The ShowBIZ-9000 weighs 8 lbs. and offers MPEG playback and TV-Out cards. The ShowBIZ-9000 utilizes an Intel MMX Pentium processor upgradable to 200MHz, and 16MB of DIMMs RAM, upgradable to 128MB. Wedge offers 1.3GB, 2.1GB, and 3.1GB hard drives, a 12.1" active-matrix Super VGA display, and a cooling fan that connects to the LCD panel to dissipate the heat from the projector's lamp. Also included in the system are a Teac 11X CD-ROM drive, a 1.44MB floppy disk drive (upgradable to an optional 120MB Iomega Zip drive or a M/O drive module), a folding tray for supporting the notebook on top of an overhead projector and a remote control unit with infrared receiver. Wedge Technology Inc., 1657 McCandless Dr., Milpitas, CA 95035. 1-800-USA-WEDGE, or URL: *http://www.wedgetech.com* .

Modems

Teleport 56 Fax/Modem

Global Village Communication, Inc. has announced two new 56Kbps fax/modems, the TelePort 56 internal ISA and external x2 fax/modems for Windows, based on genuine x2 technology. The TelePort 56 x2 products use the latest software-upgradable x2 DSP from Texas Instruments to ensure maximum x2 performance and upgradability in the future. TelePort 56 fax/modems support Plug & Play for easy installation and include an Installation Helper for quick set-up. Global Village includes a serial cable at no extra cost and includes phone-line surge protection for the external TelePort 56 modem. TelePort 56 products include the award-winning FaxWorks software, an integrated fax and data application that provides seamless integration of fax and data capabilities. The TelePort 56 family of products support Internet download speeds up to 56Kbps as well as data modem transmission speeds of 33.6Kbps, and are compatible with prior modem standards. TelePort 56 fax/modems are compatible with Windows 3.x, Windows 95 and Windows NT. Estimated street price of the internal ISA card is $159 and the external desktop modem is $169. For more information, call (408)523-1000 or URL: *http://www.globalvillage.com* .



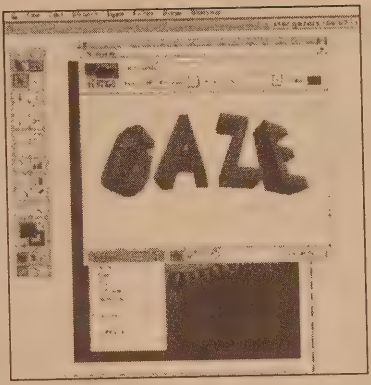
Monitors

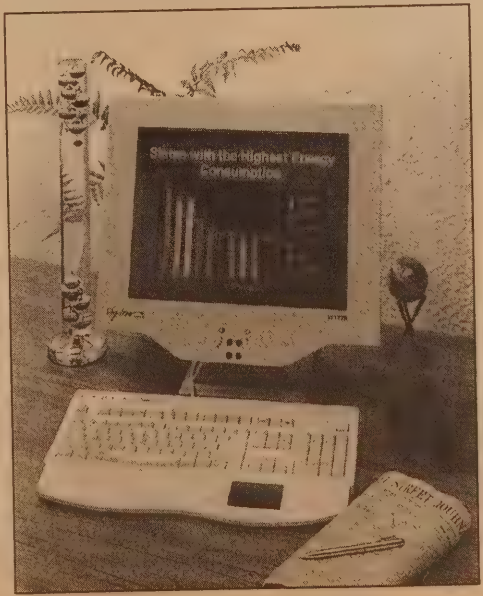
Arcadia Home Monitor

Princeton Graphic Systems has announced the new Arcadia Home Monitor, which integrates the features of a home theater with the functionality of a personal computer. The Arcadia Home Monitor allows families to surf the Internet; watch their favorite television programs and movies; play video, computer and online games; and do schoolwork, all in one entertainment system. Available in 27" and 31" screen sizes, the Arcadia Home Monitor delivers a high-resolution picture that combines the saturated colors of a television set with the crisp clarity of a computer monitor. It is designed for use with current and emerging technologies such as Digital Video Disc (DVD), WebTV, cable TV, digital satellite receivers (DSS), gaming systems such as Sega Saturn or Nintendo 64, and VCRs. As a computer monitor, the Arcadia Home Monitor's large size makes reading from the screen much easier and less straining on the eyes. With the addition of a wireless keyboard, the Arcadia Home Monitor brings "couch-top computing" to life, allowing the user to type a letter from the easy chair and change television channels at the same time using the same keyboard. With a TV card installed in the PC or Macintosh, the Arcadia Home Monitor can function as a television and computer simultaneously. Arcadia Home Monitors are available in four models; suggested retail prices begin at $799. For more information, call 1-800-747-6249, or URL: *http://www.prgr.com* .

XL177D Flat-Panel Monitor

Digitron Electronics has introduced the XL177D, an 18" XGA LCD flat-panel display offering high resolution (1,024 x 768), 64K colors, low weight (14 lbs. with removable base, 8 lbs. without), and low 22-w power consumption. Advanced manufacturing techniques now bring LCD flat panels to the desktop with bigger, brighter displays and greatly expanded viewing angles from a monitor that is only 1.9" deep (90% less then conventional monitors). The XL177D model comes complete with an AVED 2MB PCI graphic card; with digital image control, the screen is free from image distortion, mis-convergence and blurred focus. Digitron's unique monitor design has only one cord that interfaces with the graphic card—no additional power source is needed, giving mounting flexibility and a cleaner, more aesthetic appearance. Digitron's LCD monitors are a practical solution in environments such as banks, laboratories, design rooms, hospitals, and control rooms where space consideration is crucial; the removable base allows the monitor to be easily mounted to a wall. In addition to defining a whole new level of portability and creating new work space, they are flicker, static and radiation free. Suggested retail price is $3095.00, with an introductory price of $2599.00. For more information, contact Digitron, 150 Mason Cl., Ste. K, Concord, CA 94520, 1-888-676-9971, *sales@digitron.org* , or URL: *http://www.digitron.org* .





Software

Adobe ActionPack

To help new customers quickly become productive with the Adobe's integrated graphics applications, Adobe Systems Inc. has launched the Adobe ActionPack, a three-CD set of software plug-ins, professional-quality content, and interactive learning materials for PageMaker, Illustrator, and Photoshop. The Plug-ins CD-ROM contains three software applications: Extensis PageTools 2.0.1, which contains fifteen powerful plug-ins that makes Adobe PageMaker work faster, easier and more efficiently; Extensis PhotoTools, a collection of eight productivity and everyday effects for Adobe Photoshop; and Vertigo 3D Words, which enables users to add 3-D text to Adobe Illustrator designs quickly and easily. The browsable Graphics CD provides a number of fonts and hundreds of royalty-free stock photography, original clip art and Web-ready artwork images. The Learning CD offers hours of multimedia-based training and video instruction from Personal Training Systems and Virtual Training Co. which make learning come to life by providing easy-to-follow examples and hands-on experience for beginners to experts. The Adobe ActionPack is included at no charge with full retail copies of Adobe Photoshop, Adobe PageMaker and Adobe Illustrator purchased worldwide between September 1, 1997 and December 31, 1997. For more information, call (408)536-6000, or visit the ActionPack Web site at *http://www.adobe.com/actionpack/print.html* . ■

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- Sony 17" Monitor .26DP
- Toshiba 24X CD-ROM
- Sound Blaster Awe 64 Value
- E-Tech 56K Internal Fax/Modem
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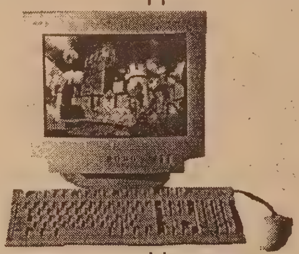

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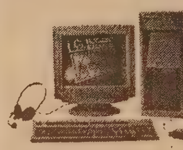

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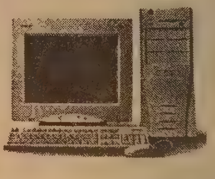

COMPAQ

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VX97- 4ISA, 4PCI , 512K PB	$93
P/I-P55T2P4 3ISA/4PCI 512K PB	$132
XP55T2P4 ATX	$135
TX97 4ISA/4PCI w/512K PB Ultra DMA	$152
TX97-E 3ISA 4PCI, 512K PB 2D/4S	$154
TX97-X 4ISA/4PCI 512kPB, Audio, USB	$189
TX97-X 4ISA/4PCI,w/o Audio512k, USB	$155
INTEL	
Marl-II Triton II 430HX Chipset w/512K PB	$105
Tucson 256K PB, Yamaha Sound Card	$125
Tucson W/ 512k PB, Yamaha Sound, USB	$167
Venus Pentium Pro, Pro150-200	*$149*
ProvidenceDual Pentium-Pro,10/100 BT Adaptec SCSI & Sound On Board	$515
Portland Pentium II, USB, Yamaha Sound	$250
FIC	
VT-501 Intel Triton VX With 512K PB	$75

CPU & MEMORY

SIMM 4/8/16MB 60NS Parity 72	$24/47/62
SIMM 32/64MB 60NS Parity 72	$129/379
SIMM 4/8/16MB 60NS Non-Parity 72	$17/30/56
SIMM 32/64MB 60NS Non-Parity 72	$111/372
EDO SIMM 4/8/16/32MB 72	$18/29/54/109
DIMM SDRAM 8/16/32/64MB	$47/71/139/349
CPU	
AMD K5-133/166	$99/$119
AMD K6-166/200 WITH MMX	*$149/$250*
AMD K6-233 WITH MMX	$329
CYRIX P166+	$69
CYRIX P200+	$88
CYRIX M2-200 MMX	$160
Pentium 100	$83
Pentium 120/133	$104/$106
Pentium 150/166	$109/$156
Pentium 200	*$230*
Pentium Pro 150	$195
Pentium Pro180	$325
Pentium Pro200	$509
MMX-166	*$159*
MMX-200/MMX-233	*$265/$379*
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QM31620ST-A 1.6GB UltraDMA 33mb/Sec	$169
QM32160ST-A 2.1GB UltraDMA 33mb/Sec	$184
QM33240ST-A 3.2GB UltraDMA 33mb/Sec	$215
QM34320ST-A 4.3GB UltraDMA 33mb/Sec	$269
QM36480ST-A 6.4GB IDE UltraDMA 33mb/Sec	$357
TM2110S 2.1GB Ultra SCSI II	$218
XP-32150W 2.1 GB 8.5ms Wide SCSI 512k	$465
SEAGATE	
ST-31720A 1.7GB EIDE 12.0ms 128k	$173
ST-32132A 2.1GB 11ms 128k EIDE	$176
ST-32171N 2.1GB 9ms 512K SCSI-2	$489
ST-32171W 2.1GB 9ms Ultra Wide SCSI	$489
ST-34371N 4.3 GB SCSI-2	$689
ST-34371W 4.3 GB SCSI-2	$689
ST-19171W 9.0GB 8ms SCSI-2	$1179
ST-19171WD 9.0GB 8ms Ultra Wide SCSI	$1279
WESTERN DIGITAL	
WD-21600 1.6GB 10ms EIDE	$169
WD-22100 2.1GB 11ms EIDE	$185
WD-22500 2.5GB 11ms EIDE	$199
WD-33100 3.1GB 11ms EIDE	$215
WD-25100 5.1GB 11ms EIDE	$395
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APA1460 Slim PCMCIA SCSI	$159
ASW-EZ SCSI 4.0 for Windows 95	$65
APA-348 Parallel To SCSI	$89
ASUS	
AS200 PCI SCSI-2	$69
AS7870 PCI SCSI-2 w/Creative Lab Sound	$205
AS2940UW PCI Ultra Wide With Sound	$199
PROMISE	
EIDE Max ISA No I/O	$25
EIDE ISA Pro (With EIDE & IO)	$44
DC-2300 Plus Enhance IDE w. 16550	$44
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- Diamond 3D 2000 w/2MB
- 16X CD ROM
- SoundBlaster 16 Compatible
- Acer 60 Watt Speakers
- 33.6K Fax/Modem
- Microsoft Win '95 CD
- Medium Tower Case
- Mitsumi 104-Key Keyboard
- Microsoft Mouse w/Mouse Pad

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EVOLVE SERIES VI

166 MMX MONSTER

- Asus VX97 M/B w/512K PB
- **Intel MMX** 166 Processor w/ fan
- Intel Triton 430 VX Chipset
- **32** MB EDO RAM 60ns 72pin
- 1.44 MB Floppy Drive
- 32 Bit EIDE W/ High Speed I/O
- **Western Digital** 3.1GB EIDE HD
- **Diamond 3D 2000 w/4MB DRAM**
- **Soundblaster Awe 64 Value**
- **Rockwell 56K Flex Fax/Modem**
- 16X CD ROM
- **Acer** 60 Watt Speakers
- Medium Tower Case
- Microsoft Windows 95 CD
- Northgate Omni Keyboard
- Microsoft Mouse w/Pad

$1099

EVOLVE SERIES VII

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- Intel Venus Pentium Pro MB
- **Intel Pentium Pro 200 MHz CPU**
- Intel 440FX Chipset
- **64MB** EDO RAM 60ns
- 1.44 MB Floppy Drive
- 32 BIT EIDE w/2S/1P/1G(16550)
- Quantum **Ultra DMA** 3.2GB 33 Mb/s
- **Diamond Fire GL 1000 w/8MB**
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- **Teac 24X CD-ROM**
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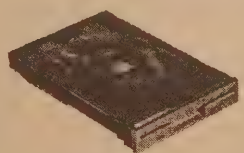

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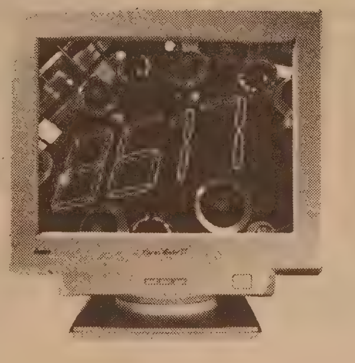

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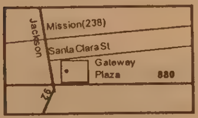

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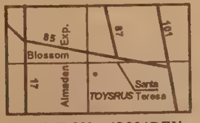

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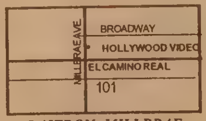

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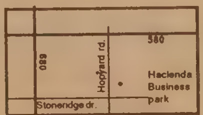

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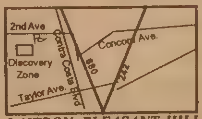

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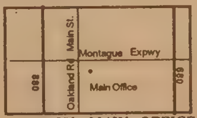

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MultiMedia & BEYOND

Gulch GOSSIP

by Jonathan E

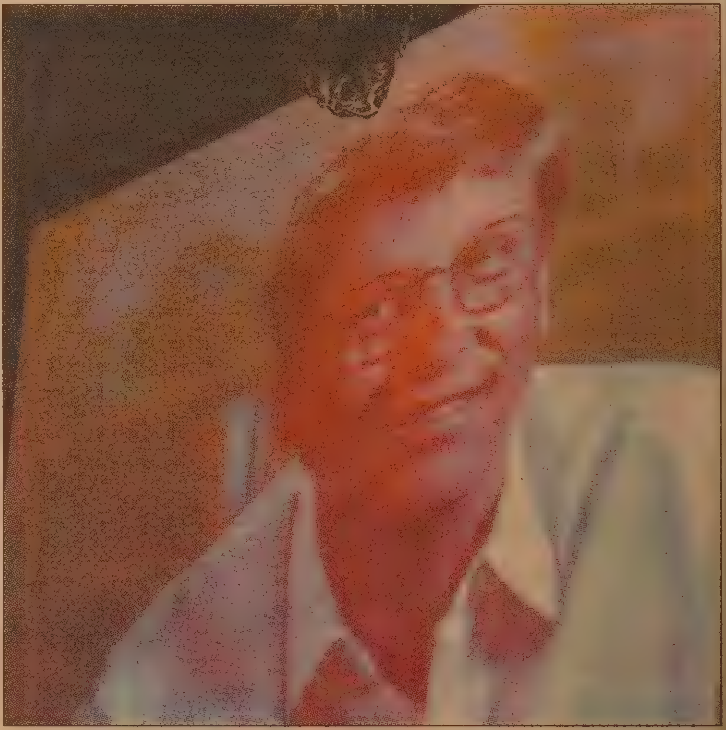
For the latest CD-ROM and software news & reviews, see our Product Spotlight section starting on page 192

I Saw The Soul of Bill Gates . . .

When I were just a wee lad at the Catholic convent where I first went to school, we spent a lot of time drawing souls. Healthy ones were white and looked pretty much like an egg, while the souls of sinners first turned gray with venial sins and then became blacker and blacker as the sinning became more fun . . .er, I mean mortal.

However, imagine my surprise when I opened *Newsweek* the week after the big announcement—you know the one I mean—to see the picture of "little man" **Steve Jobs** dwarfed by the projected image of **Bill Gates** with a big ugly black blob hovering over his head just like those souls of yesteryear; one of a sinner who really enjoys his sinning, I might add. Now, in these days of easy photo retouching and outright fakery, you would be excused for doubting the veracity of this picture but I swear on a stack of *MicroTimes* that, except for the cropping, it's reproduced here just as it appeared in my copy of *Newsweek.*

Besides, if images of the **Blessed Virgin Mary** can appear on a tortilla, the side of an office building, and the wall of a Mexico City subway station, why not the soul of Bill Gates in a news magazine? The significant question is "Why was it revealed to me, and, as far as I know, only in my copy?" I looked in vain for another example at various newsstands and can only conclude that it was a sign from above, given to me alone because of my understanding of the appearance of souls, and that now my mission is to spread the word.



Apple Lives!

WHILE WE'RE DIVINING SUCH PORTENTS within the pages of *Newsweek,* it seems also significant that the **Apple/Microsoft** deal garnered 9.75 pages of coverage in that same issue while the story on **Elvis** got 10 pages, leading one to believe that Elvis and Apple must be approximately equally healthy. A good sign for Apple since we all know that Elvis lives!

"There Are No Ladies . . ."

MEMO TO **HOWARD S. BROWN**, NEWLY HIRED VICE PRESIDENT OF SALES FOR **LIQUID AUDIO**: EVEN IF "THERE are no ladies in the room," it's questionable to make sexist comments during a sales presentation. You never know who else might be in the room who might think they're pathetic!

Liquid Audio is a forward-looking product that potentially offers great benefits, both to music consumers and producers. Your remarks exhibited the same old caveman attitudes that were already tired when you were still working on that BS degree at Babson College. As readers will hopefully discover in a future Multimedia 101 column, the product deserves better.

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  Plus: Books For Commercial Web Sites
  By Tony Reveaux 210

Booksmith Vs. CyberPatrol

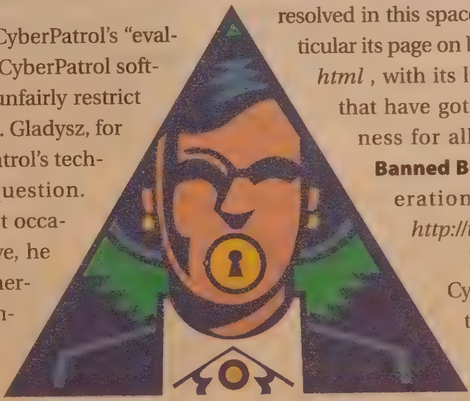
THOMAS GLADYSZ OF **THE BOOKSMITH** CALLED JUST AS GULCH Gossip went to bed last month with word of its entire Web site being blocked by **CyberPatrol**, the Internet filtering service, operated by Microsystems Software.

It seems that CyberPatrol deemed The Booksmith's page on erotica, *http://www.booksmith.com/erotica.html* , potentially offensive, and, rather than taking the trouble to block only that page, resorted to whacking the whole site.

The good news is that CyberPatrol reversed its decision and The Booksmith is now off the CyberNOT list, which appears to make the whole story a bit of a tempest in a teapot. However, as Gladysz points out, "The Booksmith is only a small piece of a much larger question." Besides the whole site being blocked when only part of it met CyberPatrol's criteria for blocking, a specific further point of contention was the fact that The Booksmith was not informed by CyberPatrol that its site was being blocked.

Students of English history will recognize this as a hallmark of the Star Chamber court back when blocking meant the chopping block and "Off with his head!" Readers of **George Orwell**, aficionados of the Soviet gulag system or other totalitarian regimes, and those knowledgeable about their interrogation methods will also appreciate the revival of the techniques of secrecy, uncertainty, and arbitrariness.

However, even though penalties for falling afoul of CyberPatrol's "evaluation system" are not so severe, there is concern that CyberPatrol software is widely used in libraries and may unduly and unfairly restrict research if not installed and used with extreme caution. Gladysz, for one, believes that the indiscriminate nature of CyberPatrol's technology calls the entire value of the product into question. Further, with his background as a bookseller who must occasionally sell material that he personally finds offensive, he objects to the role that CyberPatrol assumes as a commercial concern in censoring the words and images of others. Not, I'll bet, that he'd approve of the government doing the job either.



Last month, in the "Picking Away At PICS" item of this column, I made some flip remarks about Internet ratings and filtering services. In no way do I retract them, believing that, when there are two unalterably opposed forces facing each other, both with a smidgeon of right on their side as there are with freedom of speech and filtering issues, the only sensible response is an absurd one.

Reluctantly, I've come to the conclusion that freedom of speech and publishing is absolute and must be unrestricted in any way, primarily because there is no reliable way to decide who gets to say what. "Reluctantly" because I don't always like the results. Both the real world and cyberspace are filled with views that I find offensive, ranging from those of cigarette companies to the **National Rifle Association** to **fundamentalist Christians** to the kneejerk libertarianism of ***Wired***, even sexist remarks from the vice president of sales—and all of these viewpoints are not only intellectual abstractions but are attempting to have a direct impact on my life, so do not underestimate the cost of freedom of speech.

Having said that, it seems that a good part of the problem when discussing filtering content from the Internet is linguistic, with referrals to censoring and banning when what a filtering service is doing is closer to acting as a guide, albeit one that leads you away rather than showing you something. CyberPatrol could probably resolve its problem of being perceived as a censor by putting up a page with links to all the sites that it finds objectionable.

The one thing that is clear is that this is a complex issue, not to be resolved in this space. To explore more, visit The Booksmith's site, in particular its page on banned books, *http://www.booksmith.com/censorship.html* , with its list of books, many of them recognized as classics, that have gotten into trouble with the forces of self-righteousness for all sorts of ludicrous reasons. Note that this year **Banned Books Week** is from September 20–28. For a consideration of what CyberPatrol is up to, visit its site at *http://www.microsys.com/cyber* .

Despite Gladysz's feeling about the value of CyberPatrol, there are some things to be learned—and that's always a useful activity. One of the things I learned was that if CyberPatrol were consistent that it would block access to some of its own pages!

Where's The Freedom Of Speech For Euskal Herria Journal?

COMPARE THE RELATIVELY TAME EXPERIENCE OF THE BOOKSMITH and CyberPatrol to what happens when a real grudge match gets played out in cyberspace. **The Institute for Global Communications** (IGC) provides a network for organizations working "to serve, expand and inspire movements for peace, economic and social justice, human rights and environmental sustainability around the world."

As a small part of this mission it hosted a Web site for the **Euskal Herria Journal (EHJ)**, a New York-based organization publishing information on the movements for Basque independence in Spain and France "often ignored by the international media," and with the goal of building "communication bridges for a better understanding of the conflict." EHJ apparently included texts promoting **Euskadi Ta Askatasuna (ETA)**, a Basque armed group, which recently assassinated a Basque politician, **Miguel Angel Blanco**.

IGC received hundreds of email messages protesting the presence of this site as contrary to its mission, but it was also nearly brought to its knees by a campaign of "mail bombing." The result was that IGC was forced to suspend EHJ's Web site. While IGC managed to fend off the

continued on page 202

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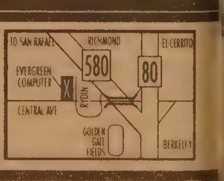

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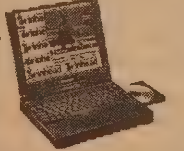

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GULCH GOSSIP

continued from page 199

attacks and return to normal operations fairly rapidly, there is concern, even outrage, about the assault and the way in which it was intended not to communicate a point of view but simply to do damage and impose a result. Blocking of a site is so mild in comparison as to barely register.

Of course, one might also argue that mail bombing is pretty restrained compared to shooting a person dead. In this case, the waters are muddied even more by the mail bombing being encouraged by "**El Pais**," formerly one of Spain's most prestigious newspapers. Further details of the incident can be read at *http://www.igc.org/igc/about/ehj_pr.html* ; IGC has put up a page at *http://www.igc.org/ehj/* asking for statements of support.

Still Going & As Busy As Ever

RANDALL PACKER'S NEW POSITION IS DIRECtor of the Multimedia Department at the **San Jose Museum of Art**. His current project there is an interactive timeline for the museum's forthcoming show, **Alternating Currents: American Art in the Age of Technology**, a selection of work from the permanent collection of the **Whitney Museum** that runs for a whole year starting on October 18. Other plans include design and implemenation of a high-speed network for the newly renovated Historic Wing of the museum and the founding of a Multimedia Center to provide access to a wide variety of online resources and arts-related CD-ROMs. On the absolutely live front, Packer is curating the premiere season of the **Bay Area Multimedia Arts & Lecture Series** of **The Berkeley Multimedia Research Center**, entitled "Virtual Worlds Beyond The Screen." The first date of the series is with **Michael Naimark** at the San Francisco Museum of Modern Art at 7 pm on October 2.

I like this quote from Naimark: "It is my observation and belief that technology, particularly computer and media technology, is having an increasingly profound effect on everyone on the planet. And that if artists don't jump in and proactively help shape these powerful new tools, it will be left by default to advertisers, the military, organized religion, and sex peddlers. Some of us believe the stakes are high." For more information, contact the Berkeley Multimedia Research Center at (510)643-0800 or visit their Web site at *http://bmrc.berkeley.edu/VirtualWorlds* . For tickets: call the City Box Office at (415)392-4400 or BASS at 1-800-225-2277. Individual tickets are $16 general or $12 students/museum members. There's a series pass for all three lectures in the series for $45 general, $30 students/museum members.

The other two lectures in the series are with **Mark Pesce** on November 6 at Berkeley Art Museum/Pacific Film Archive and **Scott Fisher** on December 4 at the San Jose Museum of Art. Both are also at 7 pm. ■

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Sweetly Humongous

The Youthful Side Of Multimedia

It's a commonplace thought that there won't be any fully realized interactive multimedia until it's been around long enough for a generation raised on early prototypes to begin producing its own.

Not that that's stopped any number of current, TV-raised producers of still-relatively-early interactive multimedia works from proclaiming that they've just made the crucial breakthrough.

Primarily because of the greater malleability and potential timeliness offered by servers compared to the stamped-in-plastic stasis of local CD-ROMs, the Web is now beginning to throw up more complex examples of interactivity and responsiveness to individual users. However, that interactivity is still limited to providing mostly text and a few graphics, rather than vast quantities of video and audio.

The bandwidth issue is a tough, or at least very expensive, nut to crack when it comes to getting homes, as opposed to businesses, universities and other institutions, fully wired—and, when it comes to the next generation experiencing a lot of interactive multimedia, schools and libraries can only be the beginning of the process. What will really bring it home, so to speak, beyond its current novelty value, is genuine competition with the television in the living room and getting into the teenager's bedroom computer when the library is closed.

Putt-Putt the car from *Putt-Putt Travels Through Time*

Thus, in spite of the phenomenon of the Web, today's multimedia is still primarily disc-based when it comes to reaching people where they live. The market may not be as big as originally projected, and certainly the concept of interactivity in its currently limited point-and-click manifestation was overvalued, but do not be surprised when emphasis on the Web wanes while interest in local discs waxes once DVDs with good content become widely available.

That day is not yet, of course, but it seems likely to arrive before the Internet can truly deliver high quality and reliable streaming video and audio to the home. With that in mind, Multimedia 101 takes a look at some current CD-ROMs designed for the children of today, those who will one day grow up to be the first generation raised with access to interactive multimedia—and to then make their own.

SWEET! DIGIZINE

On the cardboard cover of its first issue, *Sweet!* claims to be "The First Digital Magazine For The Next Generation!"—which is probably what *Blender*, *Launch* or either of the two competing

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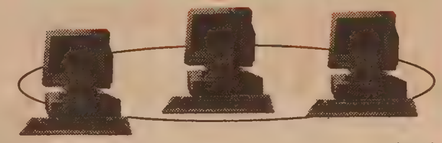

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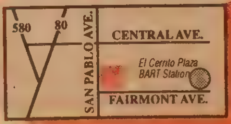

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MULTIMEDIA 101 *continued...*

Putt-Putt Travels Through Time: **Top: Putt-Putt chooses which time portal to use; bottom: Putt-Putt solves a Jurassic puzzle.**

digizines thought they themselves were three years ago!

Well, *Launch* at least continues to publish on both CD-ROM and the Web at *www.launchonline.com* , so perhaps the news is that one of the original wave of multimedia periodical publishers continues in business. In fact, *Launch* is thriving, with 100,000 paid subscribers and about 60,000 newsstand sales every issue, along with some bundling deals. A little over 20% of those subscribers are teenagers.

However, the emergence of *Sweet!* is an indication of renewed interest in the field, and there are some significant differences, both in style and content, between it and *Launch*.

On the business side, *Sweet!*'s secret weapon is that rather than just slugging it out in the marketplace, competing against countless other magazines for less than a foot of retail shelf space—and make no mistake, whether on disc or in print, the market is substantially the same in that regard—*Sweet!* hopes and believes that it has an inside track to its target audience through its association with Motivational Media Assemblies (MMA). The main business of MMA, according to the press release, "has been delivering high-energy multimedia presentations to high school assemblies for more than 12 years on important topics such as conflict resolution, substance abuse and character building."

The idea is that these high school assemblies will be readymade marketing opportunities for *Sweet!* to sell to its audience. In addition to the regular teenage version of the magazine, there will also be an educator's version with additional material designed to be used as a tool for stimulating classroom discussion.

Given that, it's no surprise that *Sweet!*'s editorial stance is less, ahh, acid than that of *Launch*, which concentrates on the show-biz commercialisms of contemporary angst and irony. In fact, *Sweet!* is so full of affirmative, feel-good-and-do-better exhortations that one wonders whether it will not be more popular with school administrators, parents, and those few kids who've already completed drug-treatment programs and know that there really is a hell down below than with most normally rebellious and try-it-all-for-themselves teenagers.

Certainly, there's little within *Sweet!*'s premier issue that I would have identified as particularly hip back when I was in its target market. One of its challenges will simply be to be timely. Perhaps the premier issue is not a reliable guide as to how it will perform in the future, but I found it hard to tell whether it was referring to this year, last year or even next year in different sections! And, obviously if it wants to seduce kids into goodness through the snares of contemporary entertainment, it must make sure that entertainment really is contemporary. Last year's hit movie or hot musical act just won't cut it when there's a whole new scene going down.

The question here is the same as always when publishing any showbiz-oriented periodical—can you forecast the curve far enough ahead? And can you get access? In addition, with computer-based multimedia, there's the question of whether you can afford enough staff to do your production within the time allowed.

Sweet! generally impressed me with its bright and snappy feel. It eschews *Launch*'s cityscape metaphor with its in-your-face advertising billboards (reportedly about to be redesigned anyway) in favor of a more TV-style presentation. There are a couple of hosts, Sabrina Lloyd from "Sliders" and actor/comedian Henry Cho, who pop up on video at the beginning of each section, give you a brief rap about how to behave, and introduce the content in that section. Dual hosts joking around are becoming a bit of a cliché, but these two are better than some I've seen on certain TV high-tech shows. Whether they're absolutely needed in this context is questionable, but they do add some personality.

Following their various spiels, you're left with standard onscreen choices of articles, arranged in various story and subject types. Most articles are split into several sections, and there are a few links from one to another; for example, the story on *Star Wars* links to a piece in the careers area about working in the digital film industry. It's not fabulously innovative but it works, although I'd still like to see a pull-down master menu so you don't have to navigate through a series of screens.

Where *Sweet!* is really good is in its use of multimedia elements in its design. Many of the screens come together with moving graphics and, better yet, there's a variety of satisfying sound effects as pieces click into place or you go from one screen to another. Overall, *Sweet!* has a clean futuristic look to it. The obvious graphics make it easy to know what to click on—even a grown-up could know what to do!

Beyond that, there's loads of well-shot videos to look at. If anything, *Sweet!* will have to be careful in the future not to be too like TV. Its major design flaw is making some of the scrolling text too much of a pain to read by showing only a few lines at a time.

HUMONGOUS ENTERTAINMENT

Aiming at the age group of about 3 up to 10 years old, Humongous Entertainment hopes to actually be the showbiz of the future rather than just be about showbiz. It also clearly hopes that its CD-ROMs will be positive educational experiences "that encourage kids to explore, discover and have fun."

Marketed in lines such as Junior Adventures, Junior Arcades, Big Thinkers, Junior Field Trips, and Junior Sports, the titles feature Humongous' own cartoon characters, Putt-Putt, Pajama Sam, Freddi Fish, and Buzzy the Knowledge Bug among others, who may pop up in different

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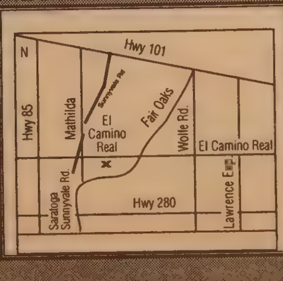

> Overall *Putt-Putt Travels Through Time* is a masterful piece of contemporary interactive media. Probably some child who plays with it will eventually produce interactive media's version of *Citizen Kane.*

titles in different lines. Humongous is set to release several new CD-ROM titles before Christmas and is also bringing the characters to television, the movies, video and other media such as a cassette/book package featuring Putt-Putt helping Santa Claus fix his sled.

I took a look at three recent releases, *Pajama Sam's Sock Works* in the Junior Arcade line, *Putt-Putt Travels Through Time* in the Junior Adventure line, and the Junior Field Trips collection, featuring Buzzy the Knowledge Bug, of *Let's Explore The Farm, Let's Explore The Airport,* and *Let's Explore The Jungle*—as the box says, "3 Great Games for the Price of 1." While I think there's a lot of mystery to what children actually like, I was quite impressed with various aspects of all these titles, although with a few reservations.

First and most simply, *Pajama Sam's Sock Works* is a gas. It could almost be the Pac-Man of the '90s, and there's no reason why adults couldn't have some fun with it when in the right mood. Sam has fallen asleep without sorting his laundry. While asleep, he dreams of various complicated machines to do the job for him. Your task is to operate those machines and sort Sam's socks into the right colored laundry baskets by maneuvering them on a series of reversible conveyer belts with chutes, pushers, sliders, and swing arms to divert and direct them. Sometimes you'll have one sock at a time, sometimes several, and some of the machines have paintpots that will change the color of the socks.

Perhaps it doesn't sound like much in print, but the whole thing is plain fun—and not entirely of the mindless kind, because some of the machines Sam dreams up are quite elaborate and make it difficult to figure out what goes where. On the other hand, some are extremely easy, but you can also design your own if you get bored with the 250 choices that come on the disc. Each game is a random selection of 100 machines (called levels within the game) out of the 250, so there's no guarantee that you'll start easy and work up to more difficult things.

I found myself starting my first game with about the simplest possible machine (so simple in fact that at first I just couldn't figure out the point of the whole thing) while in another game the same machine was presented at about level 15 or so. When you start designing your own sock-sorting machines, the whole package soars to a really fascinating level, sort of like Lego on steroids, and may even become a true classic toy.

Putt-Putt Travels Through Time takes a shot at interactive storytelling with the tale of Putt-Putt's search through the times of dinosaurs, medieval castles, the Old West, and the future as he looks for items that have accidentally been sucked out of his friend Mr. Firebird's laboratory by Firebird's newly invented time machine. It's well-done, with lots of twists and turns to follow and some amusing characters to meet. Better yet, the missing items are in different places on different occasions, and the challenges and puzzles to regain them are different from play to play, although some aspects obviously remain the same.

Given that children have a much greater tolerance for repetition than adults anyway, this title seems likely to entrance children much as a favorite book or video might. I found it quite intriguing even though I made liberal use of the cheat sheet in the ReadMe file. Occasionally, the place one had to click to use an object in Putt-Putt's inventory seemed a little arbitrary, and some of the puzzles didn't make much sense without referring to the ReadMe file, but overall *Putt-Putt Travels Through Time* is a masterful piece of contemporary interactive media. Probably some child who plays with it will eventually produce interactive media's version of *Citizen Kane.*

The triple exploration package of *Farm, Airport,* and *Jungle* is a much simpler affair and probably generally more suitable for children younger than 8 years old. Although all these titles are described as "For Kids 3-8," I think that many at the younger end of that range would find *Putt-Putt* quite, even overly, challenging; the same might be true of *Pajama Sam's Sock Works,* while I would be disappointed, even worried, if my child of 8 was still spending much time with Buzzy the Knowledge Bug.

All three explorations have the same basic template. You can move into a screen of a farm, jungle or airport scene, click on items for little animations (clicking more than once will usually trigger different animations), and move on to another scene, or in closer.

The cursor makes it obvious as to what's going to happen. Within a screen you can choose the "What Is This?" mode, which will name the object the cursor is over both with speech and text. A click will then take you to the index entry for that item. The index has simple definitions of the objects with highlighted links to other entries. Each has a picture of the item that will take you straight to the appropriate scene.

In the index entry, each word will be read aloud when the cursor is over it; the "Read Aloud" button reads the whole entry, with the appropriate sentence highlighted. (One slight glitch with the index is that whenever you enter the index from the onscreen button rather than from an object you start at A, and the only way to get to Z is to keep on clicking; there's no direct route.)

Buzzy will come to your aid in each scene with a click on his picture. A second or third click will cause him to say something different, and frequently there'll also be an animation triggered in the scene. One cool detail is that Buzzy flies in from a different angle each time. Each exploration also has four games, ranging from finding objects in the scenes, to spelling their names, to "trivia" questions about the location, to an action-type game of catching eggs, feeding the anteater, or sorting luggage (which was obviously the early version of sorting Sam's socks) and a coloring book that can be printed out.

In general, all these Humongous titles are extremely well designed. As in *Sweet!* Digizine, the multimedia details, particularly the ambient sounds, are nicely integrated into the whole experience.

Indeed, all these titles are superior in many ways to most of the multimedia titles we were seeing a couple of years ago. The details are considerably more polished, and there's an easier, more sophisticated air to them instead of the rather clunky hodge-podge qualities that were common back then.

THE USES OF ENCHANTMENT

However, the very niceness of all these titles rather sticks in my craw. The explorations of airport, farm and jungle are totally unrealistic in a

continued on page 213

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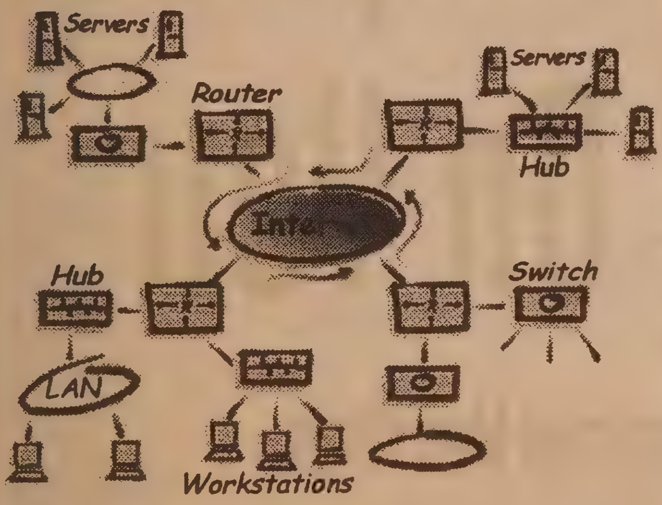

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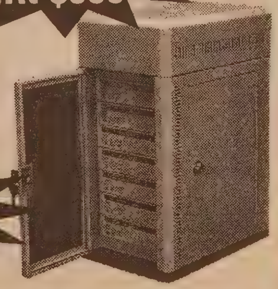

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BY TONY REVEAUX

Landscaping your property for a style makeover, deep terrain remodeling, or survivalist retrenchment? Just sprucing up the drive? This can be a complex and problematical endeavor that demands a lot of guesswork and often, just good luck.

3D Landscape (CD-ROM, Macintosh, Windows, $60) from Books That Work is a full-featured, well-designed and enjoyable 4-D workspace that can help to subtract from the guess list and expand on the luck part.

FROM 3-D TO 4-D

3D Landscape is "4-D" in that it allows you to run "what-ifs" in time as well as in space. The shadow caster tool is adjustable to your latitude and calendar time, allowing you to project where the sun will or will not shine over days, or even over years. Will a row of six Japanese maples make a nice shady separation between your driveway and the pool? Whoops—in four or five years, those saplings will have developed enough massing to get in the way of the cars. Better move them ten feet away. Uh-oh—leaves in the pool. Ahh; a row of stately lodgepole pines will work better there than any deciduous tree.

The 2-D aspect of 3D Landscape starts with the top view, or plan, of the site. You can repurpose the sample plans, which include Asian, Italian, Modern, and Formal as well as several interesting prize-winners. Because there is no palette of drawing tools in the application, you may want to start with a sample and then take advantage of 3D Landscape's easy click-and-drag modifications. Or, you can approximate your own property from a new file.

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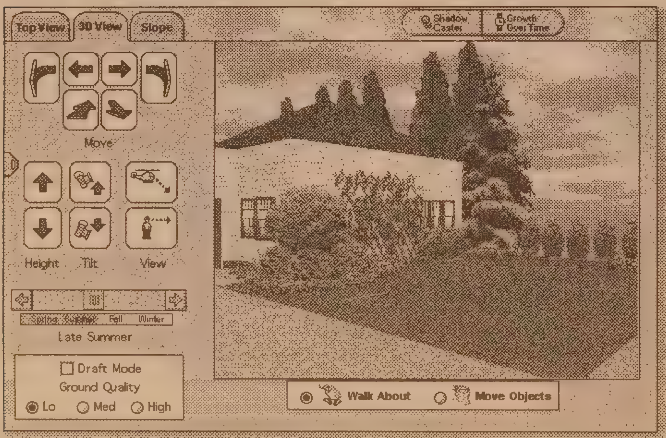
3D LANDSCAPE WILL GROW ON YOU *continued...*

What the program lacks in creation tools it makes up for in a lively and varied 3-D clip menu. You'll find basic house types and modules, trees, shrubs and plants. There are projects such as walls, fences and stairs, structures like decks, sheds and gazebos, indoor and outdoor furniture, utilities such as power lines and lamp posts. Check out the "accents" which include birdbaths, boulders, sun dials, cats, dogs and yes—children. All of these can be resized, reshaped and duplicated. Sorry, no sheep.



Even if your computer is powered with a 100MHz processor, it may take 15 or 20 minutes for a new full 3-D view to grow to maturity. Some simpler samples of form, like the Egyptian proposal with its pyramids and palms on the desert, will rise up like Pharaoh in a minute or two.

But the waits will be worth it. This simulation is no flat chessboard of space. It is a fully developed and navigable 360° spherical bubble of dimensionality.

WALKTHROUGH AND FLYOVER

You can soar over your new plan from an aerial point of view as if from a virtual helicopter, or walk through it in real time, with the reassuring audio effect of footsteps sounding your progress. There is no collision limitation so you can walk right through walls—it's like DOOM with the cheat codes. This virtual point of view acts as a reality check that allows you to test the effects of your ideas within a scaled immersive simulation.

The plant library is worth the price of the disc. It is an informative database of over 2,000 shrubs, trees and plants. You can search for specific plants or for certain attributes. Each selection brings up a good color photograph, a description and the attributes that can help you determine if it is an appropriate choice for your plan.

The selection window reveals how large the plant's mature size can reach, the range of the hardiness zones, its sun tropism, its uses and applications, bloom season and flower characteristics. Here's where you can compare a Lady Marion with a San Diego Red to see which bud's for you.

The shopping list is a simple spreadsheet that can help you get a grip on your truckload of dreams and keep track of how much your garden party may cost. With printouts of your plans, views and lists from 3D Landscape in hand, you can meet with your local landscape designers, arborists, nurseries and suppliers to arrive at a practical, region-specific program that will help your home's natural surroundings get green and keep on growing.

FOR THE WEBMASTER

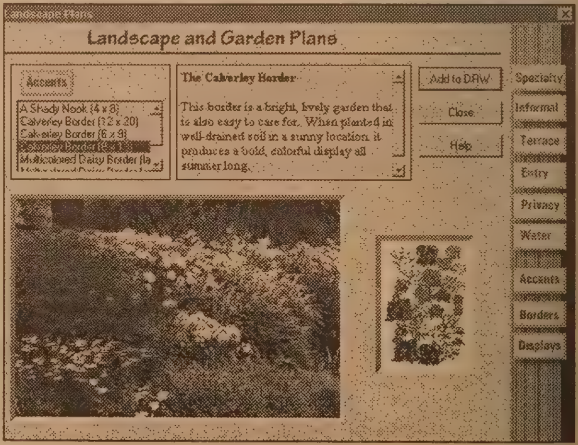
"This life is a test. It is only a test. If it had been an actual life, you would have received further instructions on where to go and what to do."

With this nameless quote, you know that these authors have really worked in WebSpace. *Producing Web Hits* by David Elderbrock, Jonathan Ezor, Laura Dalton, and Jed Weissberg (IDG Books, 431 pp, $29.99) will provide a substantial reality-check list of the concepts, issues and tools your team will need to to succeed in the design and administration of a commercial Web site.

Build a site—and they will come. In the early days of the World Wide Web, after graphical browsers like Mosaic came into use, if you had a site up, you probably did get visitors. When the first 100-page edition of the Yellow Pages made its debut, your ad was sure to get noticed. Today the number of sites has reached astronomical heights, and just being there is not enough.

Producing Web Hits starts by asking you to clarify and identify your mission in the marketing, advertising and measurement environment of the commercial Web, and how to bring your organization together and lead it to reach a profitable goal. If your content isn't "irresistible," you had better find some that is, and draft long-range plans for development and updating it. The book goes further in the outlines and details for audience building and customer development and self-checks to keep pace with the rapidly evolving goldrush free-for-all that passes for rulebooks and scorecards in WebLand. You'll find the important references, resources and basic technical facts of life here as well as an excellent selection of Web site examples.

If you are the PERL-puncher and HTML-hurler of your Web team, *WhizBang Web Site F/X: The Coolest F/X For The Hottest Web Sites* by Tom Lockwood (Que, 305 pp + CD-ROM, $34.99) will be sure to win you some wizard turns. How often have you been asked to come up with something that will really capture the browsers' attention? Every book on Web design includes some special effects. Lockwood cuts to the chase by assembling an entire book devoted to Internet show-stoppers.



A Shady Nook (4 x 8)
Calverley Border (12 x 20)
Calverley Border (6 x 9)
Multicolored Daisy Border (la

The Calverley Border

This border is a bright, lively garden that is also easy to care for. When planted in well-drained soil in a sunny location it produces a bold, colorful display all summer long.

The CD-ROM will grease the rails for you with tools such as Java JDK for Macintosh and Windows, and all the pages and code used in the book. You'll find new ways to toss text and tables and how to leverage GIFs and JPEG for greater image control. Of particular interest are the solutions for transparency, shadows and

3D LANDSCAPE WILL GROW ON YOU

continued...

trapping. The series of effects for backgrounds can help provide stronger direction over the architecture of page design. There is sound advice for tweaking audio files and multimedia effects, and the author wraps it up with the new horizons of QuickTime VR and VRML.

One way you can track the development and maturity of a technology is in the evolution of the design of books about the subject. Adobe Photoshop inspired some of the first computer editions that have had the full-color production values of coffee table books. It's been a year since Macromedia's Shockwave shipped, and now with Bob Schmitt's *Shockwave Studio: Designing Multimedia for the Web* (O'Reilly, 200 pp + CD-ROM, $39.95), we have the first "Photoshop level" Shockwave tome.

Even if your computer is powered with a 100MHz processor, it may take 15 or 20 minutes for a new full 3-D view to grow to maturity. But the waits will be worth it. This simulation is no flat chessboard of space. It is a fully developed and navigable 360° spherical bubble of dimensionality.

This is a beautiful gem of readouts; not only screen shots and palettes, but every menu, script and Web page is in full-color. Some of the animation sequences fill two pages. It covers palette control, bringing multimedia to the Web, how to make smaller movies, Lingo commands and Shockwave audio. Schmitt showcases the design talents of some of the hottest Web shops around with movie game projects such as Cajones de Luminaire, Drag 'n Doodle, Castle Mouse and Pumpkin Carving.

You can play with them on the Mac/Windows CD-ROM. This book is recommended for beginning Shockers as well as more advanced Shockmeisters. ■

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MULTIMEDIA 101

continued from page 208

sort of namby-pamby nostalgic way. The farm looks like a family farm from the turn of the century; it's nothing like the mechanized, industrial-scale and chemical operations that really supply most of our food today. The airport is a low-key place without the stress and security checks that are endemic to most airports. While the jungle exploration mentions the endangerment and extinction of some species, it doesn't say that jungles themselves are being devastated (for kids' cheap hamburger!) and it presents Africa, Asia and the Amazon as part of one continent and includes Central America as part of the Amazon.

If a title claims to be educational, it really cannot present things in too simple a way. Some kid is one day going to have to unlearn the geography of Central America being part of the Amazon—or go through life mistaken. *Putt-Putt Travels Through Time* has the old canard of human inventions, the road and the wheel, being around at the time of the dinosaurs. In general, Putt-Putt's story is far too safe; there's no threat, no down side to anything in it.

Obviously, it's possible to burden kids with too much detail, and we wouldn't want to scare them to death or make them utterly afraid of the modern world with its many unpleasant aspects. However, what Humongous and *Sweet!* present are such toothless versions of reality and/or fantasy that I wonder whether they're not doing more harm than good. For all their technical achievements, these titles, with the exception of *Pajama Sam's Sock Works* with its slightly dark and dreamy premise, leave me wanting something more like an old-fashioned fairytale with a wicked stepmother, a wolf, an ogre, something that isn't approved of by a committee of grown-ups.

Perhaps the next generation will get to this next level and learn how to deal with deeper parts of the human psyche through interactive media.

For now, I leave you with a brief extract from Bruno Bettelheim's classic "The Uses Of Enchantment" to chew over: "The idea that learning to read may enable one later to enrich one's life is experienced as an empty promise when the stories the child listens to, or is reading at the moment, are vacuous . . . Many parents believe that only conscious reality or pleasant and wish-fulfilling images should be presented to the child—that he should be exposed only to the sunny side of things. But such one-sided fare nourishes the mind only in a one-sided way, and real life is not all sunny." ■

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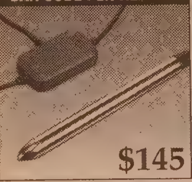

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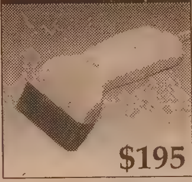

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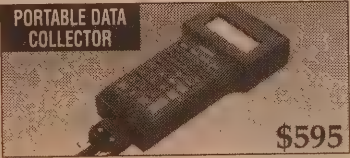

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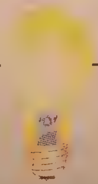

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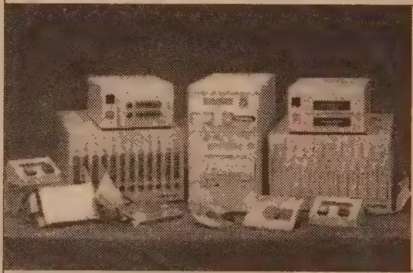

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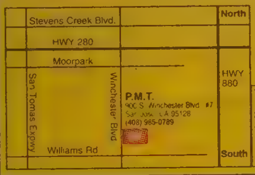

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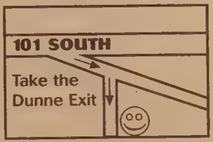

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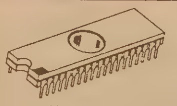

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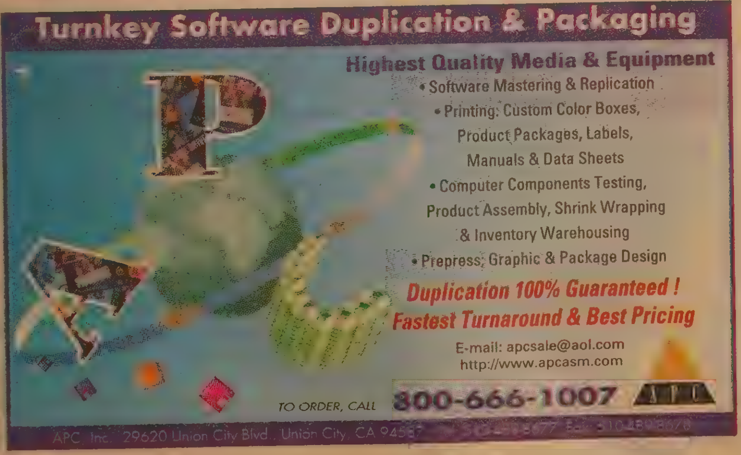

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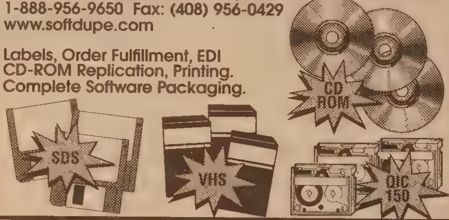

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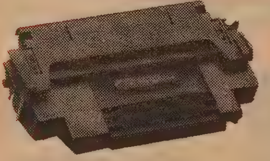

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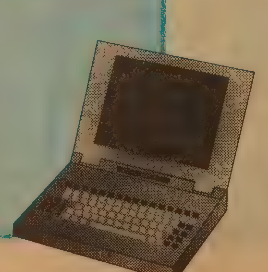

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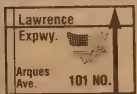

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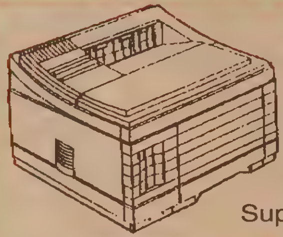

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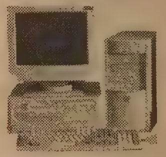

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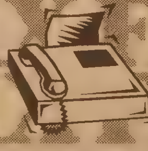

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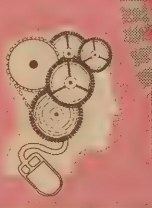

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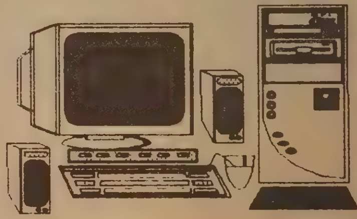

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**Mid-TowerCase w/250WP.S*
Designed for: Novell, UNIX, Win NT

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DUAL P-166/200	***$1929/$2099***

DUAL PCI/ISA: (Tyan S-1564D)

DUAL P-133/150	***$1659/$1649***
DUAL P-166/200	***$1759/$1919***

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*Intel **Pentium-II**233~300CPU w/fan
*Intel Natoma,4xPCI/4xISA w/ATX
*2xUltra IDE/IO,2S/1P (16550 fastuarts)
*64MB/EDO Memory (upto512K)
*6.4GB Ultra/33Mb/IDE harddisk
*CreativeLab AWE64PnP
*Yamaha Stereo Speaker,w/Retail
*Diamond Supra56K Fax/Voice Modem
*17",1280x1024,.28N/I,Flat
*24xSpeed IDE CD-ROM
*Teac3 1/2",1.44MB Floppy Drive
*Mid-Tower, w/250W (ATX)
*MS-Mouse&104keys Keyboard
*Diamond Stealth3D Virge,w/4MB VRAM
*MS-WindowsNT4.0 Installed (licensed)

Pentium-II-233Mhz,w/512kcache	**$2619**
Pentium-II-266Mhz,w/512kcache	**$2779**
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4GB Ultra Wide**SCSI-3HardDrive*
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**17"1280x1024,.27N/IMonitor*
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**Full-TowerCase w/300WP.S*
Designed for: Novell, UNIX, Win NT

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DUAL P6-166/180	***$Call/$2679***
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DUAL PCI/ISA:(Super P6DNF)

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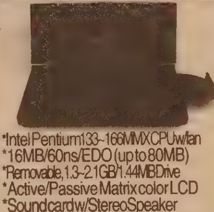

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ntel P-150/166/200	$109/$19/$249
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CDP-300SFT 20" 1280x1024,.3080hz	$1399

NEC

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CM2011M 20" 1600x1200,.28,N/I	$1159
CM800U 21" 1600x1200,.22N/I	$1385

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GT770 17" 1280x1024,.25N/I	$645
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G800 20" 1600x1280,.28 N/I	$1035
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WD21600A,1624MB EIDE, 10ms,128k	$175
WD22100A,2100MB,EIDE,12ms,128k	$189
WD32500A,2500MB,EIDE,12ms,128k	$209
WD33100A,3166MB,EIDE,12ms,128k	$229
WD3400 4GB, EIDE, 12ms, 128k	$275
WD35100A,5.1GB,10ms,U/IDE	$385
WD4360,4.3GB,UW/S3,8ms,512k,7200r	$679
Fujitsu-2949SAU,9.1GB,U/S3,7200	$985
Fujitsu-2954SYU,4.4GB,U/S3,8ms,7200	$639
Fujitsu-2954QAU,4GB,UW/S3,7200	$689
Micropolis-3391N,9.1GB,U/S3,7.9ms	$1175
Micropolis-3391W,9.1GB,UW/S3,7.9ms	$1245
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Seagate-32272W,2.1GB,UW/S3,8ms	$519
Seagate-32155N 2.1GB,U/S3, 9ms	$398
Seagate-32155W,2.1GB,US/S3,9ms	$459
Seagate-34572N,4.3GB,U/S3,8ms,7200	$675
Seagate-34572W,4.3GB,UW/S3,8ms	$719
Seagate-19171N,9.1GB,U/S3,8ms,7200	$1159
Seagate-19171W,9.1GB,UW/S3,8ms	$1198
Seagate-423451N,23GB,U/S3,8ms	$4298
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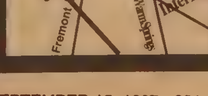

Resources

Calendar Of Events

Conferences, Shows, Special Events

September

September 8–9 Internet Outlook. Burlingame. Contact: (212)343-1900, or URL: *http://www.tpsite.com* .

September 8–11 Electronic Commerce World. Philadelphia, PA. Contact: 1-800-336-4887, *ecworld@ix.netcom.com* , or URL: *http://www.ecomworld.com* .

September 9 Technical Job Fair. Sacramento. California Job Journal. Contact: 1-800-655-JOBS.

September 11 "Intelligence, Technology, & ARTificial Society: Who or What Are We Becoming?" San Francisco. NTT New Media Minds Forum. Contact: (415)904-7740, or URL: *http://msp.sfsu.edu* .

September 13 Robert Austin Computer Show. Oakland. Robert Austin Corp. Contact: 1-800-243-7041 or URL: *http://www.robertaustin.com* .

September 14–17 ICSPAT & DSP World Expo 1997. San Diego. Contact: 1-888-239-5563, or URL: *http://www.dspworld.com* .

September 15–19 DCI's Sales Force Automation Conference and Exposition. San Jose. DCI. Contact: (508)470-3880, or URL: *http://www.dciexpo.com* .

September 15–19 IT Forum '97. New York City, NY. Miller Freeman. Contact: 1-800-232-3976, or URL: *http://www.itforum.com* .

September 16–18 DCI's Database & Client/Server World. San Jose. DCI. Contact: (508)470-3870.

September 17 Telecommuting and Home Offices. San Francisco. Society for Technical Communication. Contact: (415)985-7121.

September 22–23 Emerging Channels '97. San Francisco. PC Data, Softletter. Contact: (703)435-1025, (617)924-3944, or URL: *http://www.pcdata.com* , *http://www.softletter.com* .

September 23–25 Internet and Electronic Commerce Conference and Exposition. San Francisco. Contact: (203)256-4700, *iec@expocon.com* , or URL: *http://www.expocon.com* .

September 23–25 Intranet and Extranet Conference and Exposition. San Francisco. Gartner Group. Contact: (203)256-4700, or URL: *http://www.expocon.com* .

September 24–26 Pleasanton Business Technology Showcase: "Connect With Tomorrow." Pleasanton. Pleasanton Chamber of Commerce. Contact: (510)846-5858, *info@pleasanton.org* , or URL: *http://www.pleasanton.org* .

September 24–26 IT Metrics Summit. San Francisco. Contact: 1-800-647-7600, or *info@worldrg.com* .

September 24–26 Electronic Messaging Association (EMA) Solutions Summit 1997. San Jose. Con-tact: (703)524-5550, or URL: *http://www.ema.org* .

September 25 "Intelligence, Technology, & ARTificial Society: Who or What Are We Becoming? A Cyber-Feminine Perspective." San Francisco. NTT New Media Minds Forum. Contact: (415)904-7740, or URL: *http://msp.sfsu.edu* .

September 27 Robert Austin Computer Show. San Francisco. Robert Austin Corp. Contact: 1-800-243-7041 or URL: *http://www.robertaustin.com* .

September 29–October 2 Embedded Systems Conference. San Jose. Miller Freeman, Inc. Contact: URL: *http://www.embedsyscon.com/* .

September 29–October 3 Seybold Publishing '97 Conference and Exhibition. San Francisco. SOFTBANK Forums. Contact: 1-888-800-8922, or URL: *http://www.sbforums.com* .

September 30 (Deadline) Second Annual miro Masterpiece Video Competition. miro Computer Products, Inc. Contact: (415)855-0955, or URL: *http://www.miro.com* .

October

October 2 CNE/MCSE Certification–Meet with Success. Burlingame. LANOP. Contact: (415)344-0699.

October 2–4 CoMA '97. San Francisco. San Francisco Computer Museum/blasthaus. Contact: URL: *http://www.fog.com* .

SEPTEMBER 17

Software Forum Dinner Meeting featuring Dr. Doug Engelbart

SAN FRANCISCO

Best known as the "father of the mouse," Dr. Doug Engelbart will be the featured speaker at the Software Forum's September meeting. Dr. Engelbart has spent his career developing techniques to "augment organizations," including strategies for continuous improvement, human-tool co-evolution, and interactive collaborative hypermedia computing to support the knowledge-intensive work of groups and individuals. Dr. Engelbart is scheduled to discuss boosting collective IQ in organizations by reviewing the potential of emergent digital technology. Engelbart's life work, with his "big-picture" vision of organizational augmentation, and his persistent pioneering breakthroughs, has made a significant impact on the past, present, and future of personal, interpersonal, and organizational computing. For more information, contact the Software Forum at (650)854-8298 or URL: *http://www.softwareforum.org/meetings/dinner.html* .

SEPT. 23— SEPT. 25

i+e: intranet + extranet Conference & Exposition

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This national enterprise IT event focuses exclusively on how to successfully deploy intranet and extranet strategies for communications, collaboration, commerce and other enterprise-wide and extended enterprise applications. The expo will feature more than a hundred companies ranging from software developers, hardware manufacturers, and integrators to others who understand the Internet's benefits over LANs for enterprise networking and distributed computing. In addition, there will be free keynote presentations from Andy Grove, Ed Zander, John Sidgmore, and intranet + extranet evangelists from IBM, Microsoft and Oracle. Ten free half-day workshops presented by AT&T, Coopers & Lybrand, Ernst & Young, GE Information Services, KPMG Peat Marwick, Novadigm, Stratus, 3Com, UUNET and Verity will also be offered. For more information, call (203)256-4700, or URL: *http://www.expocon.com/i+e/index.html* .

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- MS Mouse
- Mid Tower Case w/Power Supply
- 104-key Enhanced Keyboard
- MS Windows 95
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MMX-166	$2049	$2249	$2499
MMX-200	$2299	$2499	$2699

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INTEL MARL W/MMX 512K	130
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INTEL TUSCON W/SOUND	130
INTEL VENUS	155
INTEL P-II	350
ASUS TRITON3 VX 256K	128
ASUS TRITON TX512D2	170
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ASUS KN97-X(P-II)	280
DGSP52CVX75-200	99
DGSP52CHX75-200	$105
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S3 VIRGE 3D PCI 4MB MPEG	90
ATI 3D PROTURBOXL 4MB	147
ATI 3D PROTURBOXL 8MB	190

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SUPRA EXPRESS 56K	155
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USR SPT. 336/288 V.34 EXT.	165
USR SPT. 56.2 INT.	175
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3COM 3C509 COMBO	85
3COM E-LINK IIIB (PCMCIA)	140
3COM 3C900 XL PCI COMBO	100
3COM E-LINK 3C900TPO 10BT	85
3COM FAST E-LINK 10/100	75
INTEL E-EXPR. PRO 10 ISA	60
INTEL E-EXPR. PRO 10/100	65
INTEL E-EXPR. PRO/10 COMBO	105
INTEL E-EXPR. PRO/10+ 10BT	65
5 PORT HUB	70
8 PORT HUB	$85
16 PORT HUB	185
NETMOUSE (COMBO)	25

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SAMPO 14"	175
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SAMPO 15"	245
SMILE 15" GREEN	245
ACER 17" FLAT	530
IMPRESSION 7+ 17"	530
GOLDSTAR 17" N	505
SAMPO 17"	475
SMILE 17" GREEN DIGITAL	480

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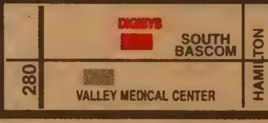

Calendar Of Events *continued...*

October 2–5 Children's Interactive Expo. San Francisco. San Francisco Partnership. Contact: (415)352-8801, *paden@sfp.org* , or URL: *http://www.sfp.org* .

October 5 Livermore Amateur Radio Klub (LARK) Swap Meet. Las Positas College, Livermore. LARK. Contact: (510)783-2803, or (510)447-3857 (eves.).

October 7–9 Data Warehouse World. Phoenix, AZ. DCI. Contact: (508)470-3880, *ConfReg@dciexpo.com* , or URL: *http://www.DCIexpo.com* .

October 8-10 Macromedia International User Conference '97. San Francisco. Contact: 1-800-287-7141, (203)840-5660, or URL: *http://ucon.macromedia.com/* .

October 9 "Intelligence, Technology, & ARTificial Society: Who or What Are We Becoming?" Featuring Thomas Dolby Robertson. San Francisco. NTT New Media Minds Forum. Contact: (415)904-7740, or URL: *http://msp.sfsu.edu* .

October 12–16 IEEE International Conference on Universal Personal Communications (ICUPC '97). San Diego. Contact: (619)534-5438, *acampora@ece.ucsd.edu* , or URL: *http://www.comsoc.org/confs/icupc/97* .

October 13–16 Microprocessor Forum '97. San Jose. Contact: 1-800-527-0288, or URL: *http://www.mdronline.com/mpf* .

October 15–17 Document Image and Information Management Forum (DIIME). Chicago, IL. Contact: 1-800-444-6243, or URL: *http://www.diime.com* .

October 15–17 Telecommuting & Home Office Exposition and Conference (THOE). San Francisco. Contact: 1-800-393-THOE, or URL: *http://www.mha.com/thoe/* .

October 18 Robert Austin Computer Show. Oakland. Robert Austin Corp. Contact: 1-800-243-7041 or URL: *http://www.robertaustin.com* .

October 19–22 NewTek Expo and Conference. Universal City, CA. Contact: 1-800-331-5706, *planexpos@ad.com* .

October 22 "Intelligence, Technology, & ARTificial Society: Who or What Are We Becoming? Virtual Communities and Virtual Worlds." San Francisco. NTT New Media Minds Forum. Contact: (415)904-7740, or URL: *http://msp.sfsu.edu* .

October 26–29 Rational ASQ International User Conference. Boston, MA. Contact: 1-888-889-0074, *sqa@jrschuman.com* , or URL: *http://www.rational.com* .

Classes, Seminars, Workshops

September

September 8 Director I: Introduction. Berkeley. Kala Institute. Contact: (510)549-2977, or URL: *http://www.kala.org* .

September 8 Free Microsoft Exchange Presentation. San Jose. Contact: (408)281-5818.

September 8 Intermediate Excel for Windows Class. Walnut Creek. Computer Education Center. Contact: (510)937-2566.

September 8 Netscape Navigator 3.0. Emeryville. Northwest Computer Systems' Training Classes. Contact: (510)653-0808, ext. 220.

September 8 Demystifying Programming. San Francisco. Center for Electronic Art. Contact: (415)512-9300, *info@cea.edu* , or URL: *http://www.cea.edu/* .

September 8 Using Photoshop Seminar. Sacramento. National Seminars Group. Contact: 1-800-258-7246, or URL: *http://www.natsem.com* .

September 8–10 Fundamentals of Visual Basic 4.0. Emeryville. Northwest Computer Systems' Training Classes. Contact: (510)653-0808, ext. 220.

September 8–10 Internetworking with MS TCP/IP. Fremont. UC Berkeley Extension. Contact: (510)642-4111, or URL: *http://www.unex.berkeley.edu:4243* .

September 8–11 Professional AutoCAD Level I. Santa Clara. The Copper Connection. Contact: (408)970-9838, *TeachACAD@aol.com* , or URL: *http://www.copperconn.com* .

September 8–12 C++ Programming Workshop. Emeryville. Northwest Computer Systems' Training Classes. Contact: (510)653-0808, ext. 220.

September 8–12 System Admin. for Windows NT Server 3.51/4.0. Emeryville. Northwest Computer Systems' Training Classes. Contact: (510)653-0808, ext. 220.

September 8–29 Painter 1. San Francisco. Center for Electronic Art. Contact: (415)512-9300, *info@cea.edu* , or URL: *http://www.cea.edu/* .

September 8–9 Using the Internet. Emeryville. Northwest Computer Systems' Training Classes. Contact: (510)653-0808, ext. 220.

September 9 Pagemaker 6.0/5.0. Emeryville. Northwest Computer Systems' Training Classes. Contact: (510)653-0808, ext. 220.

September 9 Introduction to Word for Windows Class. Walnut Creek. Computer Education Center. Contact: (510)937-2566.

September 9 Using Photoshop Seminar. Concord. National Seminars Group. Contact: 1-800-258-7246, or URL: *http://www.natsem.com* .

September 10 Intermediate Word for Windows Class. Walnut Creek. Computer Education Center. Contact: (510)937-2566.

September 10 Using Photoshop Seminar. Santa Rosa. National Seminars Group. Contact: 1-800-258-7246, or URL: *http://www.natsem.com* .

September 10 Advanced HTML Authoring. Campbell. DeVries Data Systems, Inc. Contact: (408)866-8033.

September 10–11 Web Publishing Using Microsoft FrontPage. San Francisco. UC Berkeley Extension. Contact: (510)642-4111.

September 10–24 Macintosh Basics. San Francisco. Center for Electronic Art. Contact: (415)512-9300, *info@cea.edu* , or URL: *http://www.cea.edu/* .

September 10–October 1 Photoshop 1. San Francisco. Center for Electronic Art. Contact: (415)512-9300, *info@cea.edu* , or URL: *http://www.cea.edu/* .

September 8–10 3D Studio MAX. San Rafael. A/E/C Technologies, Inc. Contact: (415)459-1050 or URL: *http://www.aectech.com* .

September 11 Excel 5.0, 7.0, and Version 97. Emeryville. Northwest Computer Systems' Training Classes. Contact: (510)653-0808, ext. 220.

September 11 Introduction to WordPerfect for Windows Class. Walnut Creek. Computer Education Center. Contact: (510)937-2566.

September 11 Fitness for the Computer Athlete. San Francisco. Center for Electronic Art. Contact: (415)512-9300, *info@cea.edu* , or URL: *http://www.cea.edu/* .

September 11 Using Photoshop Seminar. San Francisco. National Seminars Group. Contact: 1-800-258-7246, or URL: *http://www.natsem.com* .

September 11–12 AutoCAD ADE. San Rafael. A/E/C Technologies, Inc. Contact: (415)459-1050 or URL: *http://www.aectech.com* .

September 11–12 AutoCAD MAP. San Rafael. A/E/C Technologies, Inc. Contact: (415)459-1050 or URL: *http://www.aectech.com* .

September 11–12 Advanced JavaScript Programming Using Netscape Navigator. Campbell. DeVries Data Systems, Inc. Contact: (408)866-8033.

September 11–12 Deploying Active Platform and Active X Server Pages on IIS 3.0. Campbell. DeVries Data Systems, Inc. Contact: (408)866-8033.

September 11–October 2 Illustrator. San Francisco. Center for Electronic Art. Contact: (415)512-9300, *info@cea.edu* , or URL: *http://www.cea.edu/* .

Resources

Calendar Of Events *continued ...*

September 12 Intermediate WordPerfect for Windows Class. Walnut Creek. Computer Education Center. Contact: (510)937-2566.

September 12 Intro to Windows 3.1/95. Emeryville. Northwest Computer Systems' Training Classes. Contact: (510)653-0808, ext. 220.

September 12 Using Photoshop Seminar. San Jose. National Seminars Group. Contact: 1-800-258-7246, or URL: *http://www.natsem.com* .

September 12–13 Testing Application Software. Menlo Park. UC Berkeley Extension. Contact: (510)642-4111.

September 12–26 Mastering the Net with Netscape Navigator. Campbell. DeVries Data Systems, Inc. Contact: (408)866-8033.

September 13 Introduction to Photoshop. Berkeley. Kala Institute. Contact: (510)549-2977, or URL: *http://www.kala.org* .

September 13 Using the Internet Part 1: Introduction and Getting Connected. Fremont. UC Berkeley Extension. Contact: (510)642-4111.

September 13 Using the Internet Part 2: Electronic Mail. Fremont. UC Berkeley Extension. Contact: (510)642-4111.

September 13 Overview of Multimedia. San Francisco. SFSU Extended Education. Contact: (415)904-7700, or URL: *http://msp.sfsu.edu* .

September 15 Free Microsoft Exchange Presentation. San Jose. Contact: (408)281-5818.

September 15 The Basics of Web Site Design. Sacramento. AMA/Padgett Thompson. Contact: 1-800-255-4141.

September 15 QuickBooks 5.0: Beginning. Campbell. DeVries Data Systems, Inc. Contact: (408)866-8033.

September 15–17 AutoCAD Basics. San Rafael. A/E/C Technologies, Inc. Contact: (415)459-1050 or URL: *http://www.aectech.com* .

September 15–17 System Admin. for Netware 4.1. Emeryville. Northwest Computer Systems' Training Classes. Contact: (510)653-0808, ext. 220.

September 15–17 Internet Security Threats and Countermeasures. Campbell. DeVries Data Systems, Inc. Contact: (408)866-8033.

September 15–18 Professional AutoCAD Level II. Santa Clara. The Copper Connection. Contact: (408)970-9838, *TeachACAD@aol.com* , or URL: *http://www.copperconn.com* .

September 15–19 System Admin. for Windows NT Workstation. Emeryville. Northwest Computer Systems' Training Classes. Contact: (510)653-0808, ext. 220.

September 15–19 Windows 95: Installation and System Support. Emeryville. Northwest Computer Systems' Training Classes. Contact: (510)653-0808, ext. 220.

September 15–19 Troubleshooting and Support for Network Administrators. Emeryville. Northwest Computer Systems' Training Classes. Contact: (510)653-0808, ext. 220.

September 15–19 Internetworking TCP/IP with Windows NT Server 3.51/4.0. Emeryville. Northwest Computer Systems' Training Classes. Contact: (510)653-0808, ext. 220.

September 15–19 Delphi 3.0. Campbell. DeVries Data Systems, Inc. Contact: (408)866-8033.

September 15–October 13 3D Studio Max 1. San Francisco. Center for Electronic Art. Contact: (415)512-9300, *info@cea.edu* , or URL: *http://www.cea.edu/* .

September 22–25 Professional AutoCAD Level III. Santa Clara. The Copper Connection. Contact: (408)970-9838, *TeachACAD@aol.com* , or URL: *http://www.copperconn.com* .

September 16 PowerPoint 4.0, 7.0, and Version 97. Emeryville. Northwest Computer Systems' Training Classes. Contact: (510)653-0808, ext. 220.

September 16 Intro to Windows 95. San Mateo. Zephyr Business Services. Contact: (415) 655-2405, or URL: *http://members.aol.com/zephyrbus/web/* .

September 16 The Basics of Web Site Design. Oakland. AMA/Padgett Thompson. Contact: 1-800-255-4141.

September 16–23 Project 4.0, 5.0, and Version 97. Emeryville. Northwest Computer Systems' Training Classes. Contact: (510)653-0808, ext. 220.

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September 17 Lotus 1-2-3. Emeryville. Northwest Computer Systems' Training Classes. Contact: (510)653-0808, ext. 220.

September 17 Introduction to PowerPoint for Windows Class. Walnut Creek. Computer Education Center. Contact: (510)937-2566.

September 17 The Basics of Web Site Design. San Francisco. AMA/Padgett Thompson. Contact: 1-800-255-4141.

September 17–Octo-ber 1 Web Design: Database Connect-ivity. Cupertino. UCSC Extension in Cupertino. Contact: (408)342-0160 or URL: *http://www. ucsc.extension.edu* .

September 17–Octo-ber 15 Production Management for the World Wide Web. San Francisco. SFSU Extended Education. Contact: (415)904-7700, or URL: *http://msp.sfsu.edu* .

September 15–18 Microsoft Web Master Boot Camp. Campbell. DeVries Data Systems, Inc. Contact: (408)866-8033.

September 18 Introduction to Excel for Windows Class. Walnut Creek. Computer Education Center. Contact: (510)937-2566.

September 18 Careers in Multimedia. San Francisco. Center for Electronic Art. Contact: (415)512-9300, *info@cea.edu* , or URL: *http://www.cea.edu/* .

September 18 The Basics of Web Site Design. San Jose. AMA/Padgett Thompson. Contact: 1-800-255-4141.

September 18–19 AutoCAD 14 Update. San Rafael. A/E/C Technologies, Inc. Contact: (415)459-1050 or URL: *http://www. aectech.com* .

September 18–19 Fundamentals of CGI Programming. Campbell. DeVries Data Systems, Inc. Contact: (408)866-8033.

September 19 Introduction to Word for Windows Class. Walnut Creek. Computer Education Center. Contact: (510)937-2566.

September 19 Gaining Market Intelligence. Campbell. DeVries Data Systems, Inc. Contact: (408)866-8033.

September 20 Advanced Illustrator. Berkeley. Kala Institute. Contact: (510)549-2977, or URL: *http://www.kala.org* .

September 20 Advanced Illustrator. Berkeley. Kala Institute. Contact: (510)549-2977, or URL: *http://www.kala.org* .

September 20 Design Your Own Web Page–Lots of Fancy Stuff. Fremont. Acumen Systems. Contact: (510)661-0771, *acumen@webplaza.com* , URL: *http://www.acumensystems.com* .

September 20 MPEG 2 Video Compression Systems. San Francisco. Bay Area Video Coalition (BAVC). Contact: (415)861-3282, *bavc@bavc.org* , or URL: *http://www.bavc.org* .

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3C16710 TPM 8 Port Office w/Management	$448
3C16901 Linkswitch 1000 12 Port	$2449
3C166671 SuperStack 24 Port	$839

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3D Xpression Plus PC2TV PCI 4MB SDRAM	$119
3D Pro Turbo PC2TV 4MB SGRAM	$128
3D Pro Turbo PC2TV 8MB SGRAM	$163

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Stealth 3D 2000 PCI 2MB/MPEG EDO	$58
Stealth 3D 2000 PCI 4MB/MPEG EDO	$78
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TAPE BACK-UP DRIVES

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HP/COLORADO

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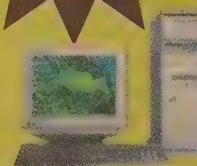

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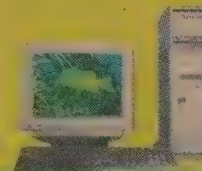
- Yamaha Stereo Speaker w/Sub Woofers
- Deluxe ATX Medium Tower
- Mitsumi Windows 95 Keyboard
- Microsoft PS/2 Mouse w/Pad

Monitor Sold Separately

Intel-266MHz MMX $1899



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- Intel EtherExpress Pro 100 Fast Ethernet
- Yamaha 16 Sound Card
- Adaptec 2940UW SCSI Controller
- 16X IDE CD-ROM
- Metro Millennium w/4MB
- Mitsumi 104 Keyboard
- Super ATX Full Tower w/3 Cooling Fans
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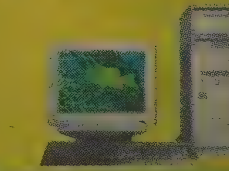
- 16X CD-ROM Drive
- Diamond Stealth 3D w/2MB
- Enhanced IDE Controller with I/O
- Mitsumi Windows 95 Keyboard
- Deluxe Mini Tower
- Serial Mouse w/Pad
- Microsoft Windows NT 4.0

Monitor Sold Separately

P-150MHz $759

P-200MHz $899



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- Deluxe ATX Medium Tower
- MS Compatible Mouse w/Pad

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SONY	
8X EIDE	$58
16X EIDE	$88
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12X EIDE	$78
24X EIDE	$109
TOSHIBA	
24X EIDE	$99
16X EIDE	$79
15.7X SCSI XM-5901B-S	$199
MITSUMI	
8X EIDE	$58
16X EIDE	$88
SANYO	
20X EIDE	$109

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SureStore C6020I 6X Read 2X Write	$499
PHILIPS	
CDD 2000/12 4X Read, 2X Write Int	$589
CDD 2010/20 4X Read, 2X Write Ext	$699
CDD 2600/12 6X Read, 2X Write Int	$699
CDD 2600/20 6X Read, 2X Write Ext	$799
YAMAHA (Retail)	
CDR-400 6X Read 4X Write Int.	$638
CDR-400 6X Read 4X Write Ext.	$799
Adaptec CDR Easy CD Pro (Win 95/NT/Win 3.11)	$150
Adaptec CD-Creator (Win 95/NT/Win 3.11)	$169
Adaptec CD-Creator for Mac	$175
Blank CD-ROM 650MB (Brand Name)	$7.99

MULTIMEDIA

SOUND CARD & SPEAKERS	
16-Bit SB Compatible	$29
CREATIVE LABS	
Sound Blaster 16 PnP	$46
Sound Blaster 16 IDE PnP	$58
Sound Blaster 32 IDE PnP	$69/
Sound Blaster 64 AWE PnP	$128
Sound Blaster 64 AWE + Gold	$149
ALTEC LANSING	
ACS51	$59
ACS52	$79
ACS53 27 Watt Speaker w/Subwoofer	$125
ACS500 5 Channel 3pcs Sound Systems	$299
YAMAHA	
M7 Speaker	$48
M15 Speaker	$78
System 35 w/subwoofer	$149
System 45 w/subwoofer	$189
OEM	
60 Watt Speakers	$15
120 Watt Speakers	$15
180 Watt Speakers	$35

MOTHERBOARDS

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6DNE Dual Pentium® Pro	$348
6DNF Dual Pentium® Pro	$388
INTEL	
"Providence" Dual Pentium® Pro (ATX)	$388
"Venus" Pentium® Pro (ATX)	$128
"Lone Tree" Pentium® w/512K (ATX)	$168
"Tucson" Pentium® w/512K (ATX)	$168
"Marl" Pentium® w/256K (ATX)	$118
"Anchorage" Pentium® w/512K (ATX)	$188
"Portland" Pentium® II (ATX)	$238
ASUS	
P55T2P4 w/512K PB (AT)	$139
VX97 w/512K (AT)	$99
TX97 w/512K PB (AT)	$159
TX97E w/512K PB (AT)	$149
TX97X w/512K PB (ATX)	$149
TX97XE w/512K PB (ATX)	$169
TX97X w/Audio w/512K PB (ATX)	$189

CPUs

Intel Pentium® Pro 150/180/200MHz	$188/258/488
Intel Pentium® MMX CPU 166/200/233MHz	$149/259/389
Intel Pentium® 150MHz/166MHz/200MHz	$109/149/259
Intel Pentium® 100MHz/120MHz/133MHz	$89/99/99
AMD K-6 166/200/233MHz MMX	$149/209/329
Intel Pentium® II 233/266MHz MMX	$558/688

MOTHERBOARDS w/CPU

Intel "Venus" Pentium Pro® M/B (ATX) Only	$128
w/150/180/200MHz	$316/386/816
Intel "Tucson" w/512K M/B (ATX) Only	$168
w/150/166/200MHz Intel CPU	$277/317/427
w/166 MMX/200 MMX Intel CPU	$317/427
Intel "Marl" w/512K M/B (ATX) Only	$118
w/150/166/200MHz Intel CPU	$227/267/377
Intel "Portland" Pentium® II w/512K M/B Only	$238
w/233/266MHz MMX Intel CPU	$796/926
Intel "Anchorage" w/512K M/B Only	$188
w/166/200/233MHz MMX Intel CPU	$337/447/577
Intel Triton w/256K Burst Cache M/B Only	$79
w/150/166/200MHz Intel CPU	$188/228/338
w/166/200MHz MMX Intel CPU	$228/338
w/AMD K-6 166/200MHz MMX	$228/288
Intel Triton TX w/512K Burst Cache M/B Only	$129
w/166/200/233 MMX Intel CPU	$178/388/518
w/AMD K-6 166/200/233MHz MMX	$278/338/468

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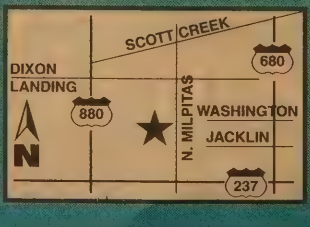

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Toshiba 24X CD-ROM	$99
Sound Blaster AWE 64 Gold w/4MB Bulk	$149
Sound Blaster AWE 64 Value Bulk	$79
S3 Virge 3D w/4MB EDO	$48
Diamond Stealth 3D 2000 w/4MB EDO	$78
ATI 3D Pro Turbo PC2TV w/8MB SGRAM	$163
Matrox Millennium II 4MB WRAM	$169
Quantum 4.3GB EIDE Hard Drive	$228
Quantum 6.4GB Ultra IDE Hard Drive	$389

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MAG

17" DJ700 1280x1024 .26dp SVGA
Win 95 Plug & Play Monitor
$518

15" DX15T Trinitron 1280x1024 .25dp PnP SVGA Monitor	$318
17" DJ702 Trintron 1280x1024 .25dp PnP SVGA Monitor	$638

SONY

17" 200SX Trinitron Tube
1280x1024 .25dp SVGA,
WIN 95, PnP, Monitor
$568*

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15" 100SX 1280x1024 .25dp SVGA	$308
15" 100SF 1280x1024 .25dp SVGA	$338
17" 200SX 1280x1024 .25dp SVGA	$568
17" 200SF 1600x1280 .25dp SVGA	$638
20" 300SFT 1600x1280 .31dp SVGA	$1580
20" 20SE2T 1600x1280 .25dp SVGA	$1758

NANAO

17" T2-17TS 1600x1280 .25dp SVGA
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17" FX-C5 1280x1024 .28dp SVGA	$688
17" FX-C6 1600x1280 .26dp SVGA	$768
17" TXC-7S 1600x1280 .25dp SVGA	$988
21" FX-E7 1600x1280 .28dp SVGA	$1618

VIEWSONIC

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17" 17PS 1600x1280 NI .25dp TCO	$628
17" PT770 1600x1280 NI .25dp	$638
17" PT775 1600x1280NI .25dp	$718
20" G800 1600x1280 .28dp	$958
21" G810 .25dp 1600x1280	$1238
21" PT813 1600x1280 .28dp	$1399
21" P815 1800x1440 .25dp	$1448

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6. Defective items replaced or repaired at our discretion.
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8. All returns subject to 15% restocking fee and cover only World-Net Microsystems brand computers; excludes peripherals and software. No refunds after 30 days.
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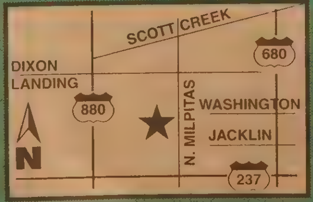
11. Price reflects cash discounts.



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Calendar Of Events

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September 20–21 Introduction to Adobe After Effects. San Francisco. Bay Area Video Coalition (BAVC). Contact: (415)861-3282, *bavc@bavc.org* , or URL: *http://www.bavc.org* .

September 22 Free Microsoft Exchange Presentation. San Jose. Contact: (408)281-5818.

September 22 Intro to Microsoft Word. San Mateo. Zephyr Business Services. Contact: (415)655-2405, or URL: *http://members.aol.com/zephyrbus/web/* .

September 22 Introduction to WordPerfect for Windows Class. Walnut Creek. Computer Education Center. Contact: (510)937-2566.

September 22 Introduction to JavaScript Programming. Campbell. DeVries Data Systems, Inc. Contact: (408)866-8033.

September 22 Word 97 Level 1. Campbell. DeVries Data Systems, Inc. Contact: (408)866-8033.

September 22–25 Building and Deploying Corporate Intranets Using MS Solutions. Campbell. DeVries Data Systems, Inc. Contact: (408)866-8033.

September 22–October 27 Managing Your Mac. San Francisco. Center for Electronic Art. Contact: (415)512-9300, *info@cea.edu* , or URL: *http://www.cea.edu/* .

September 23 Introduction to Powerpoint for Windows Class. Walnut Creek. Computer Education Center. Contact: (510)937-2566.

September 23 Act! 3.0 Level 1. Campbell. DeVries Data Systems, Inc. Contact: (408)866-8033.

September 23 Excel 97 Worksheets. Campbell. DeVries Data Systems, Inc. Contact: (408)866-8033.

September 23–October 14 Photoshop 1. San Fran-cisco. Center for Electronic Art. Contact: (415)512-9300, *info@cea.edu* , or URL: *http://www.cea.edu/* .

September 23–October 28 Director. San Francisco. Center for Electronic Art. Contact: (415)512-9300, *info@cea.edu* , or URL: *http://www.cea.edu/* .

September 24 Intermediate Excel for Windows Class. Walnut Creek. Computer Education Center. Contact: (510)937-2566.

September 24 Act! 3.0 Level 2. Campbell. DeVries Data Systems, Inc. Contact: (408)866-8033.

September 24 Word 97 Level 2. Campbell. DeVries Data Systems, Inc. Contact: (408)866-8033.

September 24–26 Auto Architect. San Rafael. A/E/C Technologies, Inc. Contact: (415)459-1050 or URL: *http://www.aectech.com* .

September 24–26 Implementing Microsoft Exchange Server and Clients. Fremont. UC Berkeley Extension. Contact: (510)642-4111, or URL: *http://www.unex.berkeley.edu:4243* .

September 25 Intermediate Word for Windows Class. Walnut Creek. Computer Education Center. Contact: (510)937-2566.

September 25 Excel 97 Charting and Organizing. Campbell. DeVries Data Systems, Inc. Contact: (408)866-8033.

September 26 Windows 95 for CAD Users. San Rafael. A/E/C Technologies, Inc. Contact: (415)459-1050 or URL: *http://www.aectech.com* .

September 26 Windows NT for CAD Users. San Rafael. A/E/C Technologies, Inc. Contact: (415)459-1050 or URL: *http://www.aectech.com* .

September 26 Word 97 Level 3. Campbell. DeVries Data Systems, Inc. Contact: (408)866-8033.

September 26 Excel 97 Advanced. Campbell. DeVries Data Systems, Inc. Contact: (408)866-8033.

September 26–October 10 QuarkXPress 1. San Francisco. Center for Electronic Art. Contact: (415)512-9300, *info@cea.edu* , or URL: *http://www.cea.edu/* .

September 26–October 17 Photoshop 2. San Francisco. Center for Electronic Art. Contact: (415)512-9300, *info@cea.edu* , or URL: *http://www.cea.edu/* .

September 27 Intro to Windows 95. San Mateo. Zephyr Business Services. Contact: (415)655-2405, or URL: *http://members.aol.com/zephyrbus/web/* .

September 27 CORBA Seminar. Fremont. Acumen Systems. Con-tact: (510)661-0771, *acumen@webplaza.com* , URL: *http://www.acumensystems.com* .

September 27 Multimedia Careers. San Francisco. SFSU Extended Education. Contact: (415)904-7700, or URL: *http://msp.sfsu.edu* .

September 27–28 Creating a Web Site. San Francisco. Bay Area Video Coalition (BAVC). Contact: (415)861-3282, *bavc@bavc.org* , or URL: *http://www.bavc.org* .

September 28–October 12 QuarkXPress 2. San Francisco. Center for Electronic Art. Contact: (415)512-9300, *info@cea.edu* , or URL: *http://www.cea.edu/* .

September 29 Free Microsoft Exchange Presentation. San Jose. Contact: (408)281-5818.

September 29 QuickBooks 5.0: Contractors. Campbell. DeVries Data Systems, Inc. Contact: (408)866-8033.

September 29–30 Visual Inter Dev. Campbell. DeVries Data Systems, Inc. Contact: (408)866-8033.

September 29–October 13 Visual Design 3. San Francisco. Center for Electronic Art. Contact: (415)512-9300, *info@cea.edu* , or URL: *http://www.cea.edu/* .

September 29–October 2 Mechanical Desktop Workshop. Santa Clara. The Copper Connection. Contact: (408)970-9838, *TeachACAD@aol.com* , or URL: *http://www.copperconn.com* .

September 29–October 20 Photoshop 3. San Fran-cisco. Center for Electronic Art. Contact: (415)512-9300, *info@cea.edu* , or URL: *http://www.cea.edu/* .

September 29–October 3 Windows NT 4.0. Campbell. DeVries Data Systems, Inc. Contact: (408)866-8033.

September 29–October 8 Implementing Netscape Technology and Solutions. Campbell. DeVries Data Systems, Inc. Contact: (408)866-8033.

September 30–December 2 Inside Multimedia Companies. San Francisco. SFSU Extended Education. Contact: (415)904-7700, or URL: *http://msp.sfsu.edu* .

September 30–October 2 An Overview of Windows NT Workstation. San Francisco. UC Berkeley Extension. Contact: (510)642-4111.

September 30–October 21 Visual Design 1. San Francisco. Center for Electronic Art. Contact: (415)512-9300, *info@cea.edu* , or URL: *http://www.cea.edu/* .

October

October 1–22 Computer Media Fundamentals. San Francisco. Center for Electronic Art. Contact: (415)512-9300, *info@cea.edu* , or URL: *http://www.cea.edu/* .

October 1–22 Freehand. San Francisco. Center for Electronic Art. Contact: (415)512-9300, *info@cea.edu* , or URL: *http://www.cea.edu/* .

October 2–23 Interactive Authoring: Hypercard. San Francisco. Center for Electronic Art. Contact: (415)512-9300, *info@cea.edu* , or URL: *http://www.cea.edu/* .

October 2–3 Remote Access and Network Security. San Francisco. UC Berkeley Extension. Contact: (510)642-4111.

October 2–November 13 Elements of Interactive Media Design. San Francisco. Center for Electronic Art. Contact: (415)512-9300, *info@cea.edu* , or URL: *http://www.cea.edu/* .

October 3–November 7 Multimedia Careers Self-Assessment Workshop. San Francisco. SFSU Extended Education. Contact: (415)904-7700, or URL: *http://msp.sfsu.edu* .

October 4 Introduction to Photoshop. Berkeley. Kala Institute. Contact: (510)549-2977, or URL: *http://www.kala.org* .

October 4 Using the Internet Part 3: Internet Tools. San Francisco. UC Berkeley Extension. Contact: (510)642-4111.

Resources

Calendar Of Events *continued...*

October 4–November 8 Animation Production Workshop. San Francisco. Center for Electronic Art. Contact: (415)512-9300, *info@cea.edu* , or URL: *http://www.cea.edu/* .

October 13–16 Professional AutoCAD Level II. Santa Clara. The Copper Connection. Contact: (408)970-9838, *TeachACAD@aol.com* , or URL: *http://www.copperconn.com* .

October 6 Director II: Custom Handlers. Berkeley. Kala Institute. Contact: (510)549-2977, or URL: *http://www.kala.org* .

October 6 Free Microsoft Exchange Presentation. San Jose. Contact: (408)281-5818.

October 6–27 Multimedia Content Development. San Francisco. SFSU Extended Education. Contact: (415)904-7700, or URL: *http://msp.sfsu.edu* .

October 6–9 Professional AutoCAD Level I. Santa Clara. The Copper Connection. Contact: (408)970-9838, *TeachACAD@aol.com* , or URL: *http://www.copperconn.com* .

October 6–October 27 Painter 2. San Francisco. Center for Electronic Art. Contact: (415)512-9300, *info@cea.edu* , or URL: *http://www.cea.edu/* .

October 7 Intellectual Property Rights: The Legal Essentials. San Francisco. SFSU Extended Education. Contact: (415)904-7700, or URL: *http://msp.sfsu.edu* .

October 8–29 Extreme 3D. San Francisco. Center for Electronic Art. Contact: (415)512-9300, *info@cea.edu* , or URL: *http://www.cea.edu/* .

October 9 Introduction to PowerPoint. Kentfield. College of Marin. Contact: (415)485-9322, or *bgwilson@marin.cc.ca.us* .

October 9–30 Painter 1. San Francisco. Center for Electronic Art. Contact: (415)512-9300, *info@cea.edu* , or URL: *http://www.cea.edu/* .

October 12 Macintosh Extravaganza. Berkeley. Kala Institute. Contact: (510)549-2977, or URL: *http://www.kala.org* .

October 13 Free Microsoft Exchange Presentation. San Jose. Contact: (408)281-5818.

October 16–November 6 Illustrator. San Francisco. Center for Electronic Art. Contact: (415)512-9300, *info@cea.edu* , or URL: *http://www.cea.edu/* .

October 18 Intermediate Photoshop. Berkeley. Kala Institute. Contact: (510)549-2977, or URL: *http://www.kala.org* .

October 18 Multimedia Careers. San Francisco. SFSU Extended Education. Contact: (415)904-7700, or URL: *http://msp.sfsu.edu* .

October 19–November 9 Color Pre-Press. San Francisco. Center for Electronic Art. Contact: (415)512-9300, *info@cea.edu* , or URL: *http://www.cea.edu/* .

October 20 Introduction to HTML. Berkeley. Kala Institute. Contact: (510)549-2977, or URL: *http://www.kala.org* .

October 20 Free Microsoft Exchange Presentation. San Jose. Contact: (408)281-5818.

October 20–November 10 Photoshop 2. San Francisco. Center for Electronic Art. Contact: (415)512-9300, *info@cea.edu* , or URL: *http://www.cea.edu/* .

October 21–November 4 Macintosh Basics. San Francisco. Center for Electronic Art. Contact: (415)512-9300, *info@cea.edu* , or URL: *http://www.cea.edu/* .

October 22–November 5 Demystifying DeBabelizer. San Francisco. Center for Electronic Art. Contact: (415)512-9300, *info@cea.edu* , or URL: *http://www.cea.edu/* .**October 25 Introduction to Illustrator.** Berkeley. Kala Institute. Contact: (510)549-2977, or URL: *http://www.kala.org* . ■

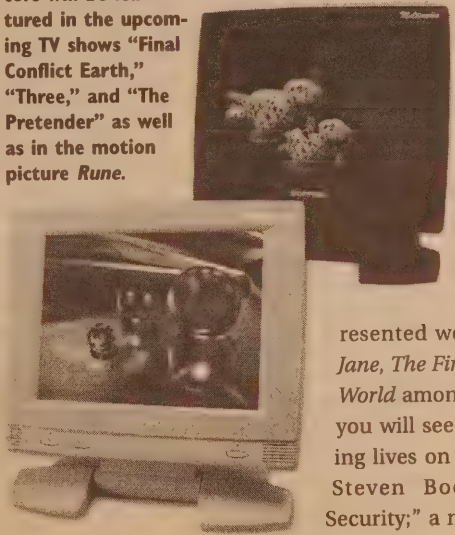
Computers On The Silver Screen

continued from page 129

the audience see the Xerox name on the White House fax machine—a fact about which Xerox's marketing department is not happy.

Yet Compaq computer is happy about the fact that the Vice President in *Air Force One*, Glenn Close, is seen using a Compaq laptop. Compaq retains Joel S. Henrie to make sure their products are on screen. He is responsible for getting Compaq on "E.R.," a placement which normally would go to Apple.

Below: The futuristic Sceptre FT 15 and FT 15G flat-screen LCD monitors will be featured in the upcoming TV shows "Final Conflict Earth," "Three," and "The Pretender" as well as in the motion picture *Rune*.



"There seems to be an onslaught of hi-tech themed movies," says Henrie, "and the placement opportunities must be good business. Ten years ago when I started, I had six competitors; now I have over sixty!" In Henrie's office, waiting to be picked up by Hollywood, is a pile of the latest Compaq equipment, including the new Presario 30/20 black line monitors which are competition for Sceptre.

Compaq is represented well in current films, *GI Jane, The First Wives' Club*, and *Lost World* among others. On television, you will see Compaq not only saving lives on "E.R.," but on the new Steven Bochco drama, "Total Security;" a new mystery show starring Ice Cube, "Players;" a new high-tech FBI drama starring Julia's brother, Eric Roberts, called "C-16;" and in "Crackers," which stars "Murphy Brown"'s Robert Pastorelli.

Strategic Planning

Sam Baldoni was one of those original six competitors in the product placement business, and is now responsible for production resources for Spelling Television. He also places Power Computing, the Apple clone, and NEC laptops on "Sunset Beach." The architectural firm seen often in "Pacific Palisades" uses all Power Computing equipment.

"The computer business is tuning in more and more to what we do," states Baldoni. " We can marry a computer company's strategic plans to Hollywood and meet their target audience." He's quick to point out the worldwide audience for film and television, and the long life a feature film enjoys when it goes to video and to network screenings.

Movies Seeking Computers

Michael Rath, the production auditor and computer advisor for *Rune*, says, "We don't have a lot of money, so we seek out entrepreneurial companies like Sceptre, who would be overjoyed to see their product in an independent movie that looks big."

The film, which takes place three years in the future, is about a kidnapper who meets his victims via chat rooms, and the victim's father, a policeman who becomes computer literate while hunting for his daughter over the same chat net which stole her away.

Rune still needs laptops for some really good scenes so, if you want to get your company in this movie, call Michael Rath at (719)630-8338. ■

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User Group Network

BULLETIN BOARDS

408

Hacker Heaven BBS. (408) 375-5455. 24 hrs., DOS, CP/M, Commodore, Atari, TRS80, etc. Experimental code forum, and support for older computers. Email and more. All welcome. Free. [Exp. #171.]

415

The Compound Eye. (415) 749-0426. 8-N-1, 24 hrs., 28,800. Free. No real info needed! NIRVANAnet. Weird messages. [Exp. #171.]

Ultimate Force. (415)441-1120. 8-N-1, 24 hrs., 300–19,200. Online games, multi-message bases, files, 1.2GB. Only comlink network in Northern CA. Free access. [Exp. #171.]

510

Camphor Fountain BBS. (510)439-0712. 24 hrs., FidoNet, Bahai'iNet, parenting, writer's club, recovery, spirituality. Since 1992. Free access. Sysop: Zaynab Richmond. [Exp. #170.]

Digital Richmond BBS. (510)231-9362. 8-N-1, 24 hrs., 28,800. Files, message nets, online games. Free. [Exp. #170.]

Dr Jack's Thing. (510) 689-4022. 42,000 adult files. Huge Midi-Wav collection. Special offer for the ladies. [Exp. #171.]

Greater Light Online. (510)741-5572, 754-6010. 24 hrs., Christian-oriented. Wildcat! 5 GUI. Files, games, message bases. Fee/free. Sysops: Michael Bryant, Beverly Reagan. [Exp. #170.]

KanonTech BBS. (510) 235-6839. Martial Arts, programming, online games, 2 lines, writers/artists conferences. MOD/Midi music section. Free. Sysop: Kanon Kubose. [Exp. #169.]

Red Dwarf BBS. (510)261-3966. 24 hrs., 300–28,800. WildNet, UFOnet, MSI SupportNet, messages, files. SciFi/RPG-based, but we offer more. All welcomed. FREE Sysop: Earl Williams. [Exp. #171.]

The Little Village. (510)237-5338. 8-N-1, 24 hrs., 33,600. Files, message nets, online games. Free. [Exp. #170.]

The Stage. (510)251-2431. 24 hrs., Pagan-oriented. PODSnet, NirvanaNet. Magickal library. Join the play. No validation, free. [Exp. #170.]

Wishing Well BBS. (510) 745-7901. up to 28,800. Over fifty-five registered online games, quality files, ANSI & RIP graphics, L.O.R.D., family board, free access! Sysop: MaryLou White. [Exp. #171.]

650

Kill-O-Byte BBS. (650) 344-1563. 24 hrs., 2400–33,600. Online files, CD-ROMs, games, film scripts, Amiga, IBM, OS/2, Windows; FREE! [Exp. #171.]

Is Your Listing Missing?

Free user group and association listings are limited to the group's name, meeting information, contact name and phone number, and a ten-word description. They will be **deleted at six-month intervals** to ensure timeliness and accuracy of information.

Free BBS listings are limited to the board's name, phone number, hours, baud rates, parameters, and a ten-word description. Please let our readers know if your BBS is free or requires a fee. Because we have an ongoing problem of boards shutting down without telling us, much to the annoyance of would-be callers and the new phone number's owner alike, we will **delete these listings after they've run three months.** The notice at the end of the listing—Exp. #xxx—refers to the last issue number it will appear in unless renewed.

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US Mail should go to: MicroTimes User Group, 3470 Buskirk Ave., Pleasant Hill, CA 94523. **Faxes** are welcome at (510)934-0883. **Email** can be sent to: *cassidy.allen@microtimes.com* or MCI:MICROTIMES.

USER GROUPS

AMIGA

AWEST—Amiga Users In SF. Meetings: 2nd Wed., 6:30 pm, Excelsior Branch Public Library, 4400 Mission St. (near Ocean), San Francisco. Call: (415) 474-1164; BBS (415)441-1120. [Exp.#172.]

TOGA—The Other Group Of Amigoids. Meetings: 4th Sat., 12:30 pm, Milpitas Community Library Meeting Room, 40 N. Milpitas Blvd., Milpitas. An informal group to share ideas, PD software, and information. Free. Contact: Randy Abel, (408)356-9405 or *rabel1 @dsp.com* ; Warren Burnham, (408)252-3406 or *wburn46506@aol.com* ; URL: *http://www.calweb.com/~rabel1* . [Exp.#174.]

ATARI

ABACUS—Atari Bay Area Computer Users Society. Meetings: 1st Sat., 1:00 pm, Potrero Branch Public Library, 2nd floor, 1616 20th St., San Francisco. Supporting all Atari computers and video games systems. Call: Roger Sinasohn, (415)469-7924, BBS (415) 564-8062. [Exp.#174.]

San Leandro Computer Club. Meetings: 1st Tues., 8:00 pm, San Leandro Main Library, Estudillo Room, 300 Estudillo Ave. Call: Robbie, (510)797-5636. [Exp.#170.]

CAD

San Francisco 3D Studio User Group. Check Web site for location, date, subject and other information. URL: *http://www.sf3dsug.com* . [Exp.#173.]

COMMODORE

CHUG (Commodore Hayward User Group). Meetings: 2nd Sat., 2:00-4:00 pm, Palma Ceia Park Clubhouse, Hayward. Commodore 64 and 128 owners are welcome to attend. Call: (510)793-7868. [Exp.#174.]

CWEST—Commodore 64/128 Users In SF. 2nd Wed., 6:30 pm, Excelsior Branch Public Library, 4400 Mission (near Ocean), San Francisco. Call: (415) 474-1164; BBS (415)441-1120. [Exp.#172.]

Diablo Valley Commodore Users Group. Meetings: 3rd Thurs., 7:00 pm, Clayton Valley Presbyterian Church, 1578 Kirker Pass Rd., Clayton. Call: (510) 689-3224. [Exp.#174.]

FUNHUG (Fremont, Union City, Newark, Hayward User Group). Meetings: 3rd Thurs., 7:30 pm, Newark Public Library, 6300 Civic Terrace Ave., Newark. For the Commodore 64/128 computer. Call: (510)793-7868. [Exp.#174.]

IBM AND COMPATIBLES

AT&T Computer Users Group. Meetings: 1st Wed., 7:00 pm, 50 Fremont St., 40th Floor (near 1st and Mission), San Francisco. Demonstrations, technical support, informal discussion. Call: (415)885-6631. [Exp.#173.]

Berkeley PC Users Group—BPCUG. Meetings: 2nd, 3rd, and 4th Tues., 7:00 pm, Winner's Circle Systems, 2618 Telegraph Ave., Berkeley. Public domain library, newsletter, and separate Beginners Special Interest Group meeting. Contact: Mel Mann, (510)526-4033 or *mel mann@aol.com*. [Exp.#174.]

Business Operations SIG of the Software Forum. Meetings: 1st Thurs., 7:00 pm, Palo Alto. Free to members, $10 for non-members. Contact: Brian Tien, *brian@leansoft.com* . [Exp.#173.]

Diablo Valley User Group—DVPC. Meetings: 1st Thurs., 7:00 pm, Bank of America, Bldg. B, 2001 Clayton Rd. at Galindo, Walnut Creek. SIGs include Internet, Windows, Beginner's, Visual Basic, education/entertainment, and more. Call: Craig Peterson, (510)671-7025, *bod@dvpc.org* , or URL: *http:www.dvpc.org* [Exp.#173.]

East Bay FOG. Meetings: 2nd Wed., 7:30 pm, Episcopal Church of St. John-in-Montclair, 1707 Gouldin Rd., Oakland. All microcomputers, MS-DOS, CP/M. Call: (510)653-2627, 8 am—10 pm. [Exp.#174.]

Golden Gate Computer Society. Meetings: 4th Mon., 7:00 pm, San Rafael Community Center, 618 B St., San Rafael. Free intro to computers class at 6:00 pm. Call: (415)454-5556, or URL: *http://www.ggcs.org* . [Exp.#170.]

Napa Valley PC Users Group. Meetings: 2nd Wed., 7:30 pm. Guests welcome. Call: Lee Schwab, (707)257-2675, *programs@nvpcug.org* , or URL: *http://nvpcug.org/* for details and location. [Exp.#174.]

PC Clubhouse. Meetings: 1st Fri., 7:30 pm, swap at 7:00 pm, Meiklejohn Hall, Room 2002 (inside 1009), CSU Hayward. Learn more about your computer. Product demos. Member help. Call: (510)538-2449, (510) 276-6450, or URL: *http://www.pcc.org*. [Exp.#174.]

PC Users Group Of The Redwoods. Meetings: 2nd Thurs., 6:30 pm, Santa Rosa Veteran's Memorial Building, East Dining Room, Maple Ave., Santa Rosa. Call: (707) 527-USER; or *info@sonic.net* , or URL: *http://www.pcugr.org* . [Exp.#169.]

USER GROUPS continued...

Peninsula Computer Club. Meetings: 2nd Thurs., 7:30 pm, 222 Laurel St., San Carlos. DOS and CP/M libraries. Call: (415)593-9981, BBS (415)571-9259, or *larryw3553@aol.com* . [Exp.#170.]

San Francisco Business Computers. Meetings: 4th Tues., 5:30 pm, 110 Pacific, #153, San Francisco. For people who use computers in their work. Visitors $10. Call: (415)788-5338 or *sfbc@juno.com* . [Exp.#169.]

San Francisco PC Users Group. Meetings: 3rd Tues., 7:30 pm, PUC Auditorium, 505 Van Ness Ave./McAllister. Presentations, Q&A sessions. Call: Jerry Stern, (415)572-1100 or 777-1332 for recorded events message. URL: *http://www.sfpcug.org/~group* . [Exp.#173.]

Stanford Palo Alto Users Group For PC (SPAUG). Meetings: final Wed., 7:30 pm, Conference Center at EPRI, 3412 Hillview, Palo Alto. All welcome. Call: Bev Altman, (415)368-9530 or 329-8252. [Exp.#172.]

INTERNATIONAL

International Macintosh Users Group (IMUG). Meetings: 3rd Thurs., 7:00 pm, Apple Computer, R&D Campus, 1 Infinite Loop, Cupertino. A forum for multilingual/multiscript computing. $2; free for IMUG members. Call: Roger Sherman, (415)859-5146. [Exp.#171.]

International Software SIG Of the Software Forum. Meetings: 4th Mon., 7:00 pm, Palo Alto. Free to members, $10 for non-members. Contact: Charlie Pfefferkorn, *charliep@crystal-media.com* . [Exp.#173.]

INTERNET

Internet Development SIG Of The Software Forum. Meetings: 4th Tues., 7:00 pm, San Francisco. Free to members, $10 for non-members. Contact: Scott Rozic, *scott@sfsoftware.com* [Exp.#173.]

Internet SIG. Meetings: 3rd Thurs., 7:00 pm, PG&E Facility, 123 Mission St., San Francisco. Contact: Patrick Lynch, (510)482-5329, or *patl@a.crl.com* . [Exp.#170.]

Internet SIG of the Association of Database Developers (A.D.D.). Meetings: 3rd Tues., 7:00 pm, CyberWorld Cafe, 526 Folsom St., San Francisco. Contact: Patrick Lynch, (510)482-5329, 482-5752 (fax), *patl@a.crl.com* , or URL: *http://www.well.com/user/add/cal.htm* . [Exp.#173.]

Internet SIG Of The Software Forum. Meetings: 2nd Wed., 7:00 pm, Palo Alto. Free to members, $10 for non-members. Contact: Dave McClure, *daveaslan@msn.com* . [Exp.#173.]

SVCS Internet SIG. Meetings: 1st Mon., 7:30 pm, Baker's Square Restaurant, 2910 El Camino Real, Santa Clara. Contact: URL: *http://www.svcs.org/sigs/inet.html* . [Exp.#174.]

LEGAL

SF Bar Assoc. WordPerfect User Group. Meetings: 3rd Wed. odd-numbered months, noon, 465 California St., 11th floor, Boardroom. Chair: Al Buchignani. Call: (415)421-5650. [Exp.#170.]

MACINTOSH

Macs Of Marin. Meetings: last Wed., 8:00 pm, Corte Madera Rec. Center, 498 Tamalpais Dr., Marin. Q&A 8:00, meeting 8:30, members free, non-members $5. Call: Richard, (415)485-5596. [Exp.#169.]

TriValley Macintosh User Group (TMUG). Meetings: 3rd Tues., 7:30 pm, Sonoma School, 543 Sonoma Ave., Livermore. Q&A, DOM, vendor presentations. Book, CD, MacAcademy training libraries. Free to public. Call: Jerry, (510)830-8838. [Exp.#172.]

MISCELLANEOUS

Bay Area Interleaf Users Group (Bayleaf). Meetings: 2nd Weds., odd-numbered months, Location varies; see Web site for details. Contact: Marilyn Salyer, (415)802-2170, *msalyer@interleaf.com* , or URL: *http://www.clearlink.com/bayleaf* . [Exp.#171.]

FileMaker Pro Database Interest Group (DIG.FM). Meetings: 3rd Thurs., 7:00 pm, Claris Corp., 5201 Patrick Henry Dr., Santa Clara. Presentations, demos, and tips by and for passionate users of FileMaker Pro for both Mac and Windows. Not affiliated with Claris. Free. Contact: *info@digfm.org* , or URL: *http://www.digfm.org* . [Exp.#172.]

FoxPro 3rd Party Tools SIG. Meetings: 1st Thurs., 7:00 pm, PG&E Building, 77 Beale St., San Francisco. Contact: Barbara Paltiel, (415)345-0152. [Exp.#170.]

Marketing SIG Of The Software Forum. Meetings: 2nd Mon., 7:00 pm, Palo Alto. Free to members, $10 for non-members. Contact: Stan Trumbull, *strum@, bayarea.net* . [Exp.#173.]

MS Access Peninsula User Group. Meetings: 2nd Fri., 1:00 pm, Metro Center Building, 9th floor, Foster City. All welcome from beginners to professionals. Contact: URL: *http://www.rampage.net/accdocs/sigs/htm* . [Exp.#173.]

SF Bay Area Powerbuilder Users Group. Meetings: 3rd Thurs., 1:00 pm. See Web site *(http://www.sfpbug.com)* for meeting location. All welcome. [Exp.#169.]

Society for Technical Communication. Meetings: 3rd Weds., 6:00 pm, London Wine Bar, 415 Sansome St., San Francisco. For technical writers and editors. Newsletter, annual competition. Non-members, $12. Contact: (415)985-7121, URL: *http://stc.org/region8/sfc/www* . [Exp.#173.]

MOBILE

Stanford Newton User Group. Meetings: 2nd and 4th Tues., 7:00 pm, Printer's Inc. Bookstore Cafe, 310 California Ave., Palo Alto. Contact: Flash Sheridan, (415)462-9203, *snug@pobox.com* , or URL: *http://pobox.com/~snug/* . [Exp.#169.]

MULTIMEDIA

Multimedia SIG Of The Software Forum. Meetings: 4th Thurs., 7:00 pm, Cubberly Community Ctr., 4000 Middlefield Rd., Rm. H-1, Palo Alto. $10. Contact: Mike Schmit, *mschmit@compcore.com* . [Exp.#171.]

OS/2

OS/2 Bay Area User Group. Meetings: 4th Mon., 7:00 pm, Stanford Linear Accelerator Center Auditorium, 2575 Sand Hill Rd., Menlo Park. Free to members, non-members $3. Presentations, demonstrations, technical discussions. Call: (510)945-7565 ext. 100, or URL: *http://www.davebsoft.com/os2baug* . [Exp.#173.]

PARADOX

Paradox SIG of Diablo Valley PC Users Group. Meetings: 2nd Thurs., 7:30 pm, Beginners and advanced, bring your PDOX problems. Free. Contact: Bill Mero, (510)685-2484, or *kmero@ix.netcom.com* . [Exp.#170.]

PROGRAMMING LANGUAGES

Delphi SIG Of The Software Forum. Meetings: 2nd Weds., 7:00 pm, North Bay. Free to members, $5 for non-members. Contact: Bjarne Winkler, *nts4618086@aol.com* . [Exp.#173.]

Fox-VFP SIG of the Association of Database Developers (A.D.D.). Meetings: 1st Thurs., 7:00 pm, 124 Beale St., mezzanine level, San Francisco. Contact: Dean Lesner, (415)788-4366, *dlesner123@aol.com* , or URL: *http://www.well.com/user/add/cal.htm* [Exp.#173.]

Java SIG of the Association of Database Developers (A.D.D.). Meetings: 1st Wed., 7:00 pm, 124 Beale St., mezzanine level, San Francisco. Contact: Mark Carranza, *mc2@surf.com* , or URL: *http://www.well.com/user/add/cal.htm* . [Exp.#173.]

Java SIG of the Software Forum. Meetings: 1st Mon., 7:00 pm, Cubberly Community Ctr., 4000 Middlefield Rd., Rm. H-1, Palo Alto. Free to members, $10 for non-members. Contact: Tom Hill, *javasig@worldware.com* . [Exp.#173.]

Visual Basic—San Francisco SIG of the Software Forum. Meetings: 3rd Thurs., 6:30 pm, San Francisco. Free to members, $10 for non-members. Contact: Bill Storage, *storage@nerve-net.com* . [Exp.#173.]

Visual Basic—Silicon Valley SIG of the Software Forum. Meetings: 2nd Thurs., 6:00 pm, Palo Alto. Free to members, $10 for non-members. Call: Allan Colby, *acolby@guidex.com* . [Exp.#173.]

VRML SIG of the Software Forum. Meetings: 3rd Tues., 7:00 pm, Mountain View. Contact: Katherine Bretz, *kbretz@fsc.fujitsu.com* . [Exp.#173.]

TEXAS INSTRUMENTS

TI-99/4A. Meetings: 2nd Sat., Oakland. Need soft-/hardware? Call: Fred, (510)530-8335. [Exp.#169.]

UNIX

UNIX SIG of the Software Forum. Meetings: 2nd Tues., 7:00 pm, Sunnyvale. Free to members, $10 for non-members. Contact: George Bosworth, *georgeb@netcom.com* . [Exp.#173.]

WINDOWS

Bay Area Windows NT User Group. Meetings: 1st Sat., 1:00 pm, MentorNet, 745 Portola Dr., San Francisco. This professional association is for NT systems administrators and developers. Contact: Edwin Rutsch, (510)528-9895, or *edwin@wyp.net* , or URL: *http://www.bantug.org* . [Exp.#169.]

Windows NT Engineering Association of Silicon Valley (NTEA). Meetings: Second Tues., 6:00 pm, Santa Clara County Office of Education building, 1290 Ridder Park Dr., San Jose. Idea exchange, new technology, job opportunities. Meetings will focus on design, set-up, and troubleshooting servers, system administration, and software development issues. No fee for first-time participants. Contact: (408)437-8803. [Exp.#172.]

Windows SIG Of The Software Forum. Meetings: 1st Weds., 6:30 pm, Palo Alto. Free to members, $20 for non-members. Contact: Fran Finnegan, *fran@fomci.com* . [Exp.#173.]

ASSOCIATIONS

Association For Women In Computing. Meetings: 1st Wed., 6:00 pm, standing room only, Crocker Galleria, 50 Post St., San Francisco. $10 members, $15 guests. Call: (415)979-8450. [Exp.#174.]

Association of Database Developers (ADD–SF). Barbara Paltiel, (415)345-0152, *barbara@paltielinc.com* , or URL: *http://www.well.com/user/add/cal.htm* . [Exp.#173.]

Society of Technical Communications, Silicon Valley Chapter. Meetings: 4th Tues., Objectives are to advance the arts and sciences of technical communication. Includes San Mateo, Santa Clara, and Santa Cruz counties. Contact: Gwen Johnson, (408)285-7942, or *Johnson_Gwen@tandem.com* . [Exp.#174.]

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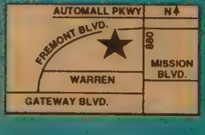

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Nordic Computers
Value-Net Internet

El Cerrito
HD Computer
Perfect Solutions Multimedia

Lafayette
EDC Systems

Pleasant Hill
Computown
Laitron Computer
Paramont Computers

Richmond
Evergreen Computer

San Pablo
Computer Applications Co.

San Ramon
Nordic Computers

Walnut Creek
Alpha Fine Furniture
Coastal
CompuMart
Computers USA
Value Net

Fresno County

Fresno
HD Systems

Marin County

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San Rafael
Datacom Systems
Domino Computer Self Service Centers
Hi-Q Systems

Sacramento County

Sacramento
Computer Leap
Domino Computer Self Service Centers
Evernet Education Services
Halted Specialities
Hi-Q Systems
JPS.Net

San Francisco County

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B.I.S.
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Burlingame
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intel inside

Pentium II-266 (Intel Portland) ATX	$2688
Pentium II-233 (Intel Portland) ATX	2538
Pentium II-266 (Asus M/B) ATX	2678
Pentium II-233 (Asus M/B) ATX	2528
Dual PP-200 (Intel Providence) w/1cpu	2788
Dual PP-200 (Super Micro) w/1cpu	2488
PP-200 (Super Micro)	2388
PP-200 (Intel Venus) ATX	2348
MMX-P233/512K (Intel Anchorage) ATX	2388
MMX-P200/512K (Intel Anchorage) ATX	2238
MMX-P233/512K (Intel Tucson) ATX	2338
MMX-P200/512K (Intel Tucson) ATX	2198
MMX-P233/256K (Super Micro)	2188
MMX-P200/256K (Super Micro)	2058
MMX-P233/512K (Intel Triton TX)	2158
MMX-P200/512K (Intel Triton TX)	2028

Upgrades

Microsoft Office Professional	178
Viewsonic P815 21"	1447

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- Yamaha Speakers
- TEAC 1.44MB 3.5" Floppy Drive
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- Keytronics Keyboard for Windows 95
- Microsoft Mouse with Pad
- Free Microsoft Windows 95
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intel inside

Pentium II-266 (Intel Portland) ATX	$1948
Pentium II-233 (Intel Portland) ATX	1798
Pentium II-266 (Asus M/B) ATX	1938
Pentium II-233 (Asus M/B) ATX	1788
Dual PP-200 (Super Micro) w/1CPU	1748
PP-200 (Super Micro)	1668
PP-200 (Intel Venus) ATX	1638
PP-180 (Intel Venus) ATX	1398
MMX-P233/512K (Intel Anchorage) ATX	1638
MMX-P200/512K (Intel Anchorage) ATX	1498
MMX-P166/512K (Intel Anchorage) ATX	1398
MMX-P233/512K (Intel Lonetree) ATX	1598
MMX-P200/512K (Intel Lonetree) ATX	1478
MMX-P166/512K (Intel Lonetree) ATX	1378
MMX-P233/256K (Super Micro)	1468
MMX-P200/256K (Super Micro)	1338
MMX-P166/256K (Super Micro)	1238

Upgrades

Microsoft Office Professional	178
Windows NT 4.0 10 Client Server	598

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MMX-P233 ONLY $1308
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- **16MB EDO** (32MB/64MB: +$60/$160)
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- Keytronics Keyboard for Windows 95
- Microsoft Mouse with Pad
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- Monitor Sold Separately (see page 3)

Internet Ready!

Pentium II-266 (Intel Portland) ATX	$1658
Pentium II-233 (Intel Portland) ATX	1528
Pentium II-266 (Asus M/B) ATX	1648
MMX-P233/256K (Intel Tucson) ATX	1308
MMX-P200/256K (Intel Tucson) ATX	1178
MMX-P166/256K (Intel Tucson) ATX	1078
P5-200/256K (Intel Marl) ATX	1098
P5-166/256K (Intel Marl) ATX	1008
MMX-P233/512K (Super Micro)	1208
MMX-P200/512K (Super Micro)	1078
MMX-P166/256K (Super Micro)	978
MMX-P233/512K (Intel Triton TX)	1178
MMX-P200/512K (Intel Triton TX)	1058
MMX-P166/512K (Intel Triton TX)	958
AMD K6-233/512K (Intel Triton TX)	1118
AMD K6-200/512K (Intel Triton TX)	1048
AMD K6-166/512K (Intel Triton TX)	958

Upgrades

Microsoft Office Professional	178
Windows NT 4.0 5 Client Server	448

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MMX-P200 ONLY $938
BUSINESS LEASE AVAILABLE

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- PCI IDE with I/O
- Sound Blaster 16 PNP & 80W Speakers
- TEAC 1.44MB 3.5" Floppy Drive
- Mid Tower Case with Power Supply
- Keytronics Keyboard for Windows 95
- Free Mouse with Pad
- Free Microsoft Windows 95
- **Free CD Deluxe Pack**
- Monitor Sold Separately (see page 3)

Internet Ready!

MMX-P233/256K (Super Micro)	$1068
MMX-P200/256K (Super Micro)	938
MMX-P166/256K (Super Micro)	838
MMX-P233/512K (Intel Triton TX)	1038
MMX-P200/512K (Intel Triton TX)	908
MMX-P166/512K (Intel Triton TX)	808
AMD K6-233/512K (Intel Triton TX)	978
AMD K6-200/512K (Intel Triton TX)	898
AMD K6-166/512K (Intel Triton TX)	808
P5-200/256K (Intel Triton VX)	888
P5-166/256K (Intel Triton VX)	788
P5-150/256K (Intel Triton VX)	738
6X86-P200+/512K (Intel Triton TX)	718
6X86-P166+/256K (Intel Triton VX)	698
AMD K5-P166/256K (Intel Triton VX)	738
AMD K5-P90/256K (Intel Triton VX)	688

Upgrades

Microsoft Office Professional	178
Windows NT 4.0 WorkStation	144

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PENTIUM II-266 (INTEL PORTLAND M/B) ATX	$238	$878	N/A	N/A	$1148	$1248	N/A	N/A	$1408	$1568
PENTIUM II-233 (INTEL PORTLAND M/B) ATX	238	748	N/A	N/A	1018	1118	N/A	N/A	1278	1438
PENTIUM II-266 (ASUS M/B) ATX	238	878	N/A	N/A	1148	1248	N/A	N/A	1408	1568
DUAL PP-200C (Intel Providence M/B) ATX w/ 1 CPU	484	958	N/A	N/A	1218	1348	N/A	N/A	1478	1668
DUAL PP-200C (SUPER MICRO M/B) w/ 1 CPU	288	758	$908	$928	978	1078	$1138	$1168	1238	1398
PP-200C (SUPER MICRO M/B)	228	678	828	848	898	998	1058	1088	1158	1318
PP-180C (SUPER MICRO M/B)	228	438	588	608	658	758	818	848	918	1078
PP-200C (INTEL VENUS M/B) ATX	124	588	758	778	828	928	988	1018	1088	1248
MMX-P233/512K (Intel Lonetree M/B) ATX (Anchorage: +$20)	178	548	N/A	N/A	808	938	N/A	N/A	1068	1258
MMX-P200/512K (Intel Lonetree M/B) ATX (Anchorage: +$20)	178	428	N/A	N/A	688	818	N/A	N/A	948	1138
MMX-P166/512K (Intel Lonetree M/B) ATX (Anchorage: +$20)	178	328	N/A	N/A	588	718	N/A	N/A	848	1038
P5-200C (INTEL MARL M/B) ATX (Tucson: +$70)	108	338	508	528	578	678	738	768	838	998
P5-166C (INTEL MARL M/B) ATX (Tucson: +$70)	108	248	418	438	488	588	648	678	748	908
P5-150C (INTEL MARL M/B) ATX (Tucson: +$70)	108	208	378	398	448	548	608	638	708	868
MMX-P233/256K (SUPER MICRO M/B)	124	498	628	648	698	798	858	888	958	1118
MMX-P200/256K (SUPER MICRO M/B)	124	368	498	518	568	668	728	758	828	988
MMX-P166/256K (SUPER MICRO M/B)	124	268	398	418	468	568	628	658	728	888
P5-200/512K (ASUS VX97 M/B)	98	328	458	478	528	628	688	718	788	948
P5-166/512K (ASUS VX97 M/B)	98	238	368	388	438	538	598	628	698	858
P5-150/512K (ASUS VX97 M/B)	98	198	328	348	398	498	558	588	958	818
MMX-P233/512K (INTEL TRITON TX)	92	458	588	608	658	758	818	848	918	1078
MMX-P200/512K (INTEL TRITON TX)	92	338	468	488	538	638	698	728	798	958
MMX-P166/512K (INTEL TRITON TX)	92	238	368	388	438	538	598	628	698	858
AMD K6-P233/512K (INTEL TRITON TX)	92	408	538	558	608	708	768	798	868	1028
AMD K6-P200/512K (INTEL TRITON TX)	92	338	468	488	538	638	698	728	798	958
AMD K6-P166/512K (INTEL TRITON TX)	92	238	368	388	438	538	598	628	698	858
P5-200C (INTEL TRITON VX)	62	298	428	448	498	598	658	688	758	918
P5-166C (INTEL TRITON VX)	62	208	338	358	408	508	568	598	668	828
P5-150C (INTEL TRITON VX)	62	158	288	308	358	458	518	548	618	778
6X86-P200+/512K (INTEL TRITON TX)	92	148	278	298	348	448	508	538	608	768
6X86-P166+ (INTEL TRITON VX)	62	128	258	278	328	428	488	518	588	748
AMD K5-166C (INTEL TRITON VX)	62	158	288	308	358	458	518	548	618	778
AMD K5-133C (INTEL TRITON VX)	62	138	268	288	338	438	498	528	598	758
AMD K5-90C (INTEL TRITON VX)	62	108	238	258	308	408	468	498	568	728
486DX4-100C VLB-PCI	58	98	228	248	298	398	458	488	558	718

*BASIC SYSTEM: MOTHERBOARD & CPU, 8MB RAM, IDE WITH I/O, 1.44MB FDD, CASE WITH POWER SUPPLY, AND 101-KEY KEYBOARD.

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- TEAC 1.44MB 3.5" Floppy Drive
- Mitsumi Keyboard for Windows 95
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- Free Mouse and Microsoft Windows 95
- Monitor Sold Separately (please see next page)

Internet Ready!

MMX-P233/256K (Super Micro)	$928
MMX-P200/256K (Super Micro)	798
MMX-P166/256K (Super Micro)	698
MMX-P233/512K (Intel Triton TX)	898
MMX-P200/512K (Intel Triton TX)	768
MMX-P166/512K (Intel Triton TX)	668
AMD K6-233/512K (Intel Triton TX)	838
AMD K6-200/512K (Intel Triton TX)	768
P5-200/256K (Intel Triton VX)	748
P5-166/256K (Intel Triton VX)	648
P5-150/256K (Intel Triton VX)	608
6X86-P200+/512K (Intel Triton TX)	588
6X86-P166+/256K (Intel Triton VX)	568
AMD K5-P166/256K (Intel Triton VX)	598
AMD K5-P133/256K (Intel Triton VX)	588
AMD K5-P790/256K (Intel Triton VX)	548

See Next Page for All of Our Upgrade Prices

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- TEAC 1.44MB 3.5" Floppy Drive
- Mitsumi Keyboard for Windows 95
- Medium Tower Case w/Power Supply
- Free Microsoft Windows 95 and Mouse
- Monitor Sold Separately (please see next page)

intel inside

Pentium II-266 (Intel Portland) ATX	$1478
Pentium II-233 (Intel Portland) ATX	1348
Pentium II-266 (Asus M/B) ATX	1468
Pentium II-233 (Asus M/B) ATX	1338
MMX-P233/512K (Intel Lonetree) ATX	1168
MMX-P200/512K (Intel Lonetree) ATX	1038
MMX-P166/512K (Intel Lonetree) ATX	938
MMX-P233/256K (Super Micro)	1028
MMX-P200/256K (Super Micro)	898
MMX-P166/256K (Super Micro)	798
MMX-P233/512K (Intel Triton TX)	1008
MMX-P200/512K (Intel Triton TX)	878
MMX-P166/512K (Intel Triton TX)	778
P5-200/512K (Intel Triton TX)	868
P5-166/512K (Intel Triton TX)	778
P5-150/512K (Intel Triton TX)	728

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HI-TECH POWER SYSTEMS
(BUSINESS LEASE AVAILABLE)

- **32MB EDO RAM** (64MB: Add $110)
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- **Matrox Mystique 220 w/4MB**
- **US Robotics 56.6 Fax Modem (Internet Ready)**
- TEAC 1.44MB 3.5" Floppy Drive
- Keytronics Keyboard for Windows 95
- Medium Tower Case or w/Power Supply
- Free Microsoft Windows 95 and Mouse
- Monitor Sold Separately (please see next page)

intel inside

Pentium II-266 (Intel Portland) ATX	$1728
Pentium II-233 (Intel Portland) ATX	1598
Pentium II-266 (Asus M/B) ATX	1718
Pentium II-233 (Asus M/B) ATX	1588
Dual PP-200 (Super Micro) w/1CPU	1568
MMX-P233/512K (Intel Anchorage) ATX	1428
MMX-P200/512K (Intel Anchorage) ATX	1298
MMX-P166/512K (Intel Anchorage) ATX	1198
PP-200 (Intel Venus) ATX	1438
PP-180 (Intel Venus) ATX	1198
MMX-P233/256K (Super Micro)	1268
MMX-P200/256K (Super Micro)	1148
MMX-P166/256K (Super Micro)	1048
P5-200/256K (Intel Marl) ATX	1168
P5-166/256K (Intel Marl) ATX	1068
P5-150/256K (Intel Marl) ATX	1018

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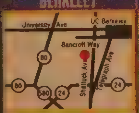

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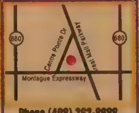

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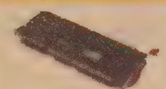

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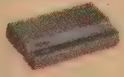

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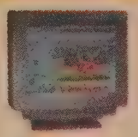

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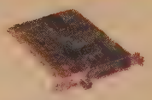

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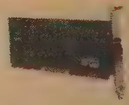

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DRIVES

Removable HDD, 3.5" FDD, 10X CD-ROM. Allows CD-Rom, HDD and FDD to perform at the same time.

INPUT/OUTPUT

PCMCIA: Two Type II or One Type III, 87 Keys, Windows 95 keyboard, Built-in Glide Pad, One IrDA Compliance Port. Built-In TV Port

AUDIO

Built-in Stereo Speakers, 16-Bit Stereo Sound Module, Stereo Line-in, Microphone-in and Line-out.

SOFTWARE

Microsoft Windows 95 and Family Bundle

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- Built-In Pointing Device
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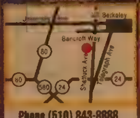

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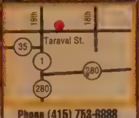

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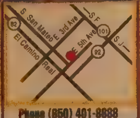

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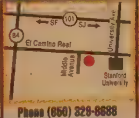

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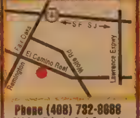

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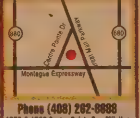

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3. Prices and availability subject to change w/o notice.
4. Shipping, insurance and COD charges are extra and non-refundable. Prices reflect cash discounts.
5. Return shipping must be insured, prepaid and bearing an RMA# on the shipping label.
6. Defective items replaced or repaired at our discretion.
7. No responsible for typos.
8. All returns subject to 15% restocking fee and cover only Hi-Tech USA brand computers, excludes peripherals, software and notebook computers. No refunds after 30 days.
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10. Purchase orders are welcomed and subject to approval.

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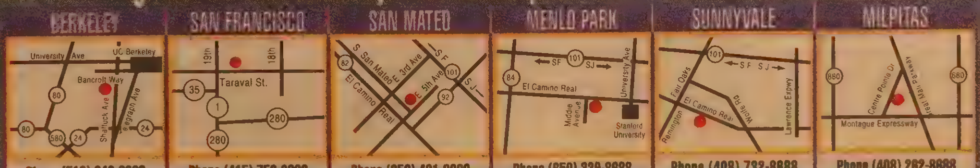

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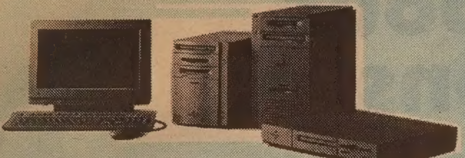

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DVORAK'S LAST COLUMN • BY JOHN C. DVORAK

Complaining About Public Relations

Or, Is Manipulating The Media All That Easy?

I'm often asked by companies and individuals what I think of the various PR firms that I encounter on a day-to-day basis.

My attitude towards PR is often ambiguous, but I do work with many PR people whom I like and trust. Over the years I suppose I've insulted one-too-many PR people by saying NO to some proposal or other and a certain resentment on many of their parts makes it difficult to work with them.

Then there's the problem with the writer-turned-PR pro. Most of these people, when going from journalism into PR, develop a low self-esteem, since PR people are looked down upon by writers and editors. They are perceived as having "sold out"—usually for the money. If you want to toy with these people, ask them, "Why in heaven's name did you decide to become a flack?!" This particular moniker—"flack"—seems to really make them hopping mad. The true PR pros who are comfortable with themselves often find it amusing if you call them flacks.

Separating The Wheat From The Chaff

A PR pro's job is to service the customer's account. This can be done in a variety of ways.

It's not in the best interest of the customer if the PR representative is a jerk. I'm always stunned at how difficult this overall concept is to understand. There are many instances of PR people being rude and downright mean. Some cannot understand that writers like myself are here to serve the needs of readers, *not* the needs or desires of their clients.

Many PR people are fairly stupid too, sorry to say. Let me give you a favorite example. A few years ago *Wired* magazine did a profile of me. It was designed to be an axe job, but there simply wasn't enough to axe. I'm essentially a pretty boring guy. The writer called a slew of PR people—mostly women—to see if any would badmouth me. A bunch apparently did, according to the article.

The only one who did not was Andrea Cunningham, the sharp cookie who runs Cunningham Communications. She made some innocuous comment about me being a good guy, or not as bad as everyone thinks, or some such thing. She was quoted.

I've run into her maybe three or four times in a decade. She's like Melissa Waggoner and Sherry Benjamin. These women are behind the scenes, hiding. But she knows what's what. I read this nice comment and will have a positive response someday down the road. I'll take her call, do her a favor, who knows? She knows it can't hurt to be nice. And she's the only person whose name was mentioned—the sign of good PR.

The boneheads (and they are boneheads) who blathered on about what a jerk I was did themselves no good and risked hurting their clients, which they obviously don't care about. If you're going to be in the PR business, know how to conduct yourself. I'm amazed at how few people understand that.

Another thing that often amazes me is the lack of understanding of the basics of the computer business. I don't expect to be out-nerded by a PR woman, but I do expect them to know something about the technology that they're selling.

I know plenty of incredibly savvy women who go into some heavy-duty techie company and essentially learn everything there is to know, to the point where you don't even bother having to talk to the CTO. This, to me, is cool. These are not the women who moan and groan every time I write something belittling the PR profession—like this piece you're reading. They tend to agree with me and wish more people were like them—dedicated. I will cite some of these people on my Web site *http://www.dvorak.org* (eventually) as a service to headhunters.

Reality Check

Anyway, what has triggered this diatribe was a scathing letter I got from a PR professional from Boston over some comments I made in a trade newsletter called *Media Alert*.

It was the same old gripes I've always had. I want my press releases by email, and don't like getting called by people asking me if I got a press release. Apparently to this woman this was asking too much, and she blew her top. The fact that I would receive such a harsh letter from someone with major clients worries me. First of all I don't like being pushed around by PR people. And I especially don't like to think that PR people think they can push around *any* writers, let alone me.

This sometimes means I have to be blunt, and this seems to rub some people the wrong way. For instance, sometimes a PR person is told to get a meeting with the CEO and "Dvorak" so they can demo the latest version of the Water Torture Suite for Windows, and I said I wasn't interested.

After seventeen years of snubbing CEOs of going-nowhere software companies, I have to expect some complaining. What bothers me is that I know more than a few writers who scream at and belittle PR people, and make a fuss when they even get one phone call. They boil over when they get email. All I do is refuse free meals and minimize useless demos and hopeless boring PowerPoint presentations about things that nobody cares about.

The fact is that PR today is over the top. Its influence is excessive. It's out of whack. A look at the Gulf War is a study in PR manipulation of the media. And that was a war! You can imagine the nonsense that goes on in high technology where there is less editorial concern about outside influence of a story.

What's incredibly pathetic is the fact that few CEOs today can even talk without their "handler" with them. It's pathetic. This is not going to improve. The flow of information and the truth itself are more and more sanitized by media manipulators. While many PR people think that they are doing the public a service, they always know in the back of their minds they were only hired because the company was too cheap to buy serious advertising and reckoned that PR was free advertising. And if anyone is treated like an idiot, it's the CEO, who has to be "handled" by a supposed expert. It's ridiculous. ■

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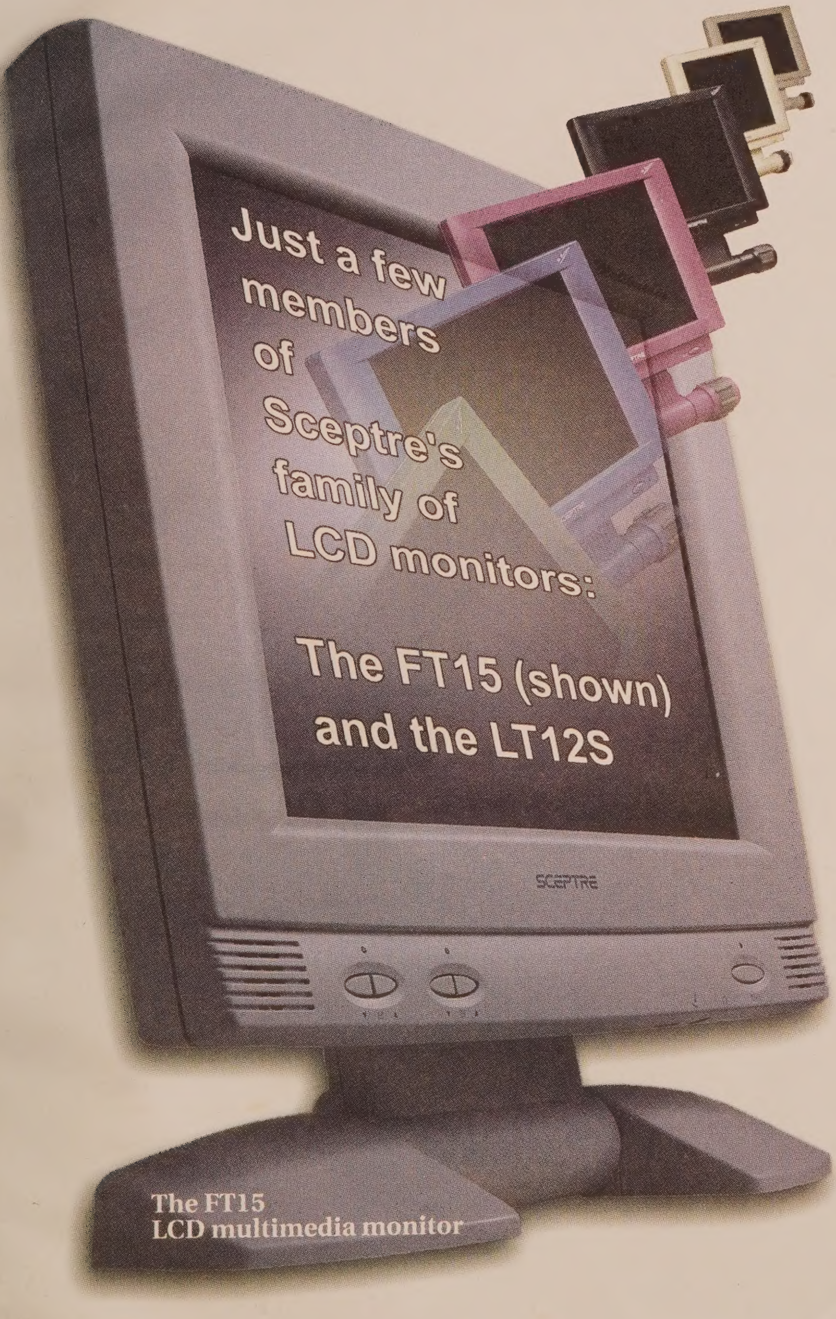

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